
Massachusetts Department of Public Health

**Health Survey Program
Bureau of Health Statistics, Research and Evaluation**

A Profile of Health Among Massachusetts Adults, 2001

Results from the Behavioral Risk Factor Surveillance System

*Mitt Romney ~ Governor
Kerry Healey ~ Lieutenant Governor
Ronald Preston ~ Secretary of Health and Human Services
Christine C. Ferguson ~ Commissioner, Department of Public Health
Deborah Klein Walker ~ Associate Commissioner for Programs and Prevention*

*Bureau of Health Statistics, Research and Evaluation
Daniel J. Friedman ~ Assistant Commissioner
Bruce B. Cohen ~ Director, Research and Epidemiology
Zi Zhang ~ Director, Health Survey Program*

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This report was prepared by the staff of the Behavioral Risk Factor Surveillance Program:

Susan Keyes, DrPH, MPH, Senior Research Analyst
Phyllis Brawarsky, MPH, Research Analyst
Karen Clements, MPH, Research Analyst
Nahara Borja, MPH, Epidemiologist
Christine Macaluso, MSPH, Epidemiologist
Xuelei Pan, Ph.D., Research Analyst
Zi Zhang, MB, MPH, Director

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For further information about this report, about the BRFSS, or the Health Survey Program, please contact: Zi Zhang, MB, MPH, Health Survey Program, Bureau of Health Statistics, Research and Evaluation, Massachusetts Department of Public Health, 250 Washington Street, 6th floor, Boston, MA 02108–4619. Telephone: (617) 624–5623. Email: zi.zhang@state.ma.us

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EXECUTIVE SUMMARY

Since 1986, Massachusetts has conducted the Behavioral Risk Factor Surveillance System (BRFSS), a representative, statewide telephone survey of Massachusetts residents ages 18 years and older. The BRFSS collects information from a sample of Massachusetts residents on a wide variety of health issues and is an important source of information about the prevalence of risk factors that contribute to premature death, illness, and disability among Massachusetts residents. The information obtained in this survey assists in identifying the need for health interventions, monitoring the effectiveness of existing programs, and developing health policy and legislation. In 2001, 8,628 interviews were conducted among Massachusetts adults. Presented below are some of the highlights from the 2001 Massachusetts BRFSS.

OVERALL HEALTH MEASURES

Overall Health Status

Nearly 12% of respondents described their overall health as fair or poor, with more Hispanics* (26%) reporting fair or poor health than any other race-ethnicity group. The percentage of adults reporting fair or poor health has increased since 1993 (9% to 12%). Nearly 10% of Massachusetts adults experienced 15 or more days of poor mental health during the previous month. Women (11%) were more likely than men (8%) to report poor mental health.

Quality of Life

Overall, 7% of respondents felt sad or depressed for 15 or more days in the past month and 7% felt physical pain for 15 or more days in the past month. Hispanic (11%) and Black adults (10%) were more likely to report feeling depressed compared to White (7%) and Asian adults (1%).

HEALTH CARE ACCESS AND UTILIZATION

Health Care Access

Approximately 7% of respondents, ages 18-64, did not currently have health insurance. Women (6%) were less likely than men (9%) to not have health insurance. Among adults ages 18-64, no health insurance decreased with increasing age, education and income. The percentage of adults with no health insurance has decreased since 1996 (12% to 7%). Nearly 87% of all adults had a personal doctor. Women (91%) were more likely than men (82%) to have a personal doctor.

Dental Health Care

Overall, 77% of respondents reported visiting the dentist in the past year. Approximately 18% of Massachusetts adults reported having six or more teeth missing due to disease or decay. Women (79%) were more likely than men (75%) to have seen a dentist in the past

* When referring to White, Black or Asian, these categories include only non-Hispanic respondents. All respondents reporting Hispanic ethnicity are included in the Hispanic category. See page 6 for more details.

year. The percentage of adults with 6 or more teeth missing decreased with increasing education and income.

RISK FACTORS AND PREVENTIVE BEHAVIORS

Tobacco Use

Among Massachusetts adults, nearly 20% were current smokers, while 2% reported being heavy smokers (more than 20 cigarettes per day). Current smoking rates were lower among Hispanic (15%) and Asian (13%) adults compared to White (20%) and Black (22%) adults. Smoking rates have declined since 1986. Heavy smoking was higher among men (3%) than women (2%). White adults (3%) were more likely to be heavy smokers than adults in any other race-ethnicity group. In addition, 57% of current smokers had attempted to quit during the past year and 41% were planning to quit within the next 30 days.

Environmental Tobacco Smoke

69% of respondents live in households where smoking is prohibited and 61% support banning smoking in restaurants. Hispanics were more likely than any other race-ethnicity group to prohibit smoking in their homes (81%). Women (65%) were more likely than men (58%) to support a ban on smoking in restaurants. Support for a smoking ban in restaurants has increased since 1992.

Alcohol Use

Overall, 18% of Massachusetts adults reported binge drinking and 7% reported heavy drinking in the past month. Men were more likely to report binge drinking (27%) than women (10%). Young adults, ages 18-24, were more likely to report binge drinking (40%) and heavy drinking (17%). White adults were also more likely to report binge (19%) and heavy drinking (8%) compared to all other race-ethnicity groups.

Overweight and Obese

Overall, 54% of respondents were considered to be overweight, while 17% were considered to be obese. Hispanic (64%) and Black adults (64%) were more likely than other race-ethnicity groups to be overweight. Hispanic (21%) and Black adults (24%) were also more likely than other race-ethnicity groups to be obese.

Physical Activity

Overall, 77% of respondents reported exercising at least once over the past month, while 51% participated in regular physical activity. White adults (53%) were more likely than any other race-ethnicity group to have exercised regularly in the past month.

Flu Shot and Pneumonia Vaccination

Approximately 71% of Massachusetts adults over the age of 65 had a flu shot in the past year and 64% ever had a pneumonia vaccination. White adults over age 65 were more likely than any other race-ethnicity group to report having gotten either a flu or pneumonia shot in the past year.

Hypertension Awareness

Approximately 24% of Massachusetts adults reported having high blood pressure. The percentage of adults with high blood pressure increased with increasing age, with Black adults (30%) being more likely to report high blood pressure than any other race-ethnicity

group. Of those who reported high blood pressure, 72% took medication for their condition, with women (78%) being more likely than men (65%) to take medication.

Cholesterol Awareness

Overall, 81% of respondents had their cholesterol checked in the past 5 years and 30% reported high cholesterol. Cholesterol screening increased with increasing levels of education. Men (32%) were more likely than women (28%) to report high cholesterol. The percentage of adults reporting high cholesterol increased with increasing age up to age 74 then decreased slightly.

CHRONIC HEALTH CONDITIONS

Cardiovascular Disease

Among adults 35 and older, 8% reported having heart disease while 2% reported having had a stroke. Men (10%) were more likely than women (7%) to have heart disease. Individuals in the lowest education level were more likely to report both heart disease and stroke compared to those with more education.

Diabetes

Overall, 6% of respondents reported having diabetes. The prevalence of diabetes increased with age from less than 1% among adults ages 18-34 years to 17% among adults 65-74 years. White adults (6%) were less likely to have diabetes compared to Black adults (8%).

Asthma

Overall, 13% of Massachusetts adults reported that they had ever been told by a doctor that they had asthma. The percentage of adults who ever had asthma decreased with increasing age. Asians were less likely than any other race-ethnicity group to report ever having asthma (4%) or to currently have asthma (3%). About 10% of Massachusetts adults reported currently having asthma.

Arthritis

Among adults ages 45 and older, 45% reported having arthritis, with women (52%) more likely than men (37%) to report arthritis. The percentage of adults who reported arthritis decreased with increasing income and those with four or more years of college were less likely to report arthritis than those with less education.

Disability

Nearly 20% of respondents reported a disability or limitation and 5% required help with daily activities as a result of their disability. The percentages of men and women reporting a disability were similar but women (7%) were more likely to require help as a result of their disability than men (3%). The percentage of adults with a disability increased with increasing age.

CANCER SCREENING

Cervical Cancer Screening

Approximately 90% of female respondents had a Pap smear in the past three years. Women ages 75 and older (63%) were less likely to have had a Pap smear in the past three

years than younger women. The percentage of women who had a Pap smear in the past three years increased with increasing education.

Colorectal Cancer Screening

Overall, 39% of respondents ages 50 or older reported having a blood stool test in the last two years and 45% reported having had a sigmoidoscopy or colonoscopy in the past five years. The percentage of adults who had a sigmoidoscopy or colonoscopy in the past five years increased from 1993 to 2001.

Prostate Cancer Screening

Approximately 64% of men ages 50 and older reported having had a prostate specific antigen (PSA) test in the past year and 69% had a digital rectal exam (DRE) in the past year. Men ages 70 –79 (77%) were more likely to have had a PSA test compared to younger men.

OTHER TOPICS

HIV Testing

Overall, 46% of respondents ages 18-64 reported ever having an HIV test and 13% reported having been tested for HIV within the past year. Adults ages 25-34 (65%) and 35-44 (55%) were more likely to have ever been tested to HIV compared to younger and older adults. Black and Hispanic adults were more likely to have ever been tested for HIV and to have been tested for HIV in the last year compared to White and Asian adults.

Intimate Partner Abuse

Approximately 4% of women ages 18-59 experienced intimate partner abuse, which includes both fear for safety OR violence inflicted by an intimate partner, in the past 12 months. Two percent of women reported experiencing violence from an intimate partner in the past 12 months. The percentage of women who reported intimate partner abuse or intimate partner violence decreased with increasing age, education and income.

Firearms

Nearly 13% of respondents reported keeping firearms in or around their homes. Men (16%) were more likely than women (10%) to have firearms. White adults (14%) were more likely to have firearms than adults of all other race-ethnicity groups. Adults with less than a high school education were less likely to have firearms compared to adults of higher education levels.

Illicit Drug Use

Approximately 45% of respondents reported ever using illicit drugs, and 6% reported illicit drug use in the past 30 days. Men (50%) were more likely than women (41%) to have ever used illicit drugs. Men (8%) were also more likely than women (5%) to have used illicit drugs in the past 30 days. Illicit drug use in the past 30 days decreased with increasing age and was lower among college graduates compared to those with lower educational levels.

Introduction

WHAT IS THE BRFSS?

BRFSS collects data on a variety of health characteristics, risk factors for chronic conditions, and preventive behaviors.

The Behavioral Risk Factor Surveillance System (BRFSS) is a continuous, random-digit-dial, telephone survey of adults ages 18 and older, and is conducted in all states as a collaboration between the Centers for Disease Control and Prevention (CDC) and state departments of health. The survey has been in the field in Massachusetts since 1986. The BRFSS collects data on a variety of health characteristics, risk factors, and preventive behaviors. The information obtained in this survey assists in identifying the need for health interventions, monitoring the effectiveness of existing intervention and prevention programs, developing health policy and legislation, and measuring progress toward attaining state and national health objectives.

Each year, the BRFSS includes a core set of questions that were developed by the CDC. In 2001, these questions pertained to health status, health care access and utilization, hypertension awareness, cholesterol awareness, asthma, diabetes, arthritis, immunization, tobacco use, alcohol consumption, disability/limitations, physical activity, prostate and colorectal cancer screening, firearm ownership, and HIV/AIDS. In addition to the core CDC questions, the Massachusetts BRFSS added a number of topics including childhood asthma, tobacco policy, intimate partner abuse, dental health, cervical cancer screening, cardiovascular disease, and illicit drug use.

ABOUT THIS REPORT

This report summarizes selected results from the 2001 Massachusetts BRFSS. First, we provide a description of survey questions and analyses used for key variables. Then overall percentage estimates of these variables are presented, along with selected comparisons by demographic and other characteristics. This allows us to assess whether there are specific groups of adults who are either at risk for chronic conditions or who are more likely to practice healthy behaviors. Where we have sufficient years of data, we provide figures comparing 2001 results to previous years' data for variables that have been measured over time. This allows us to assess trends in specific characteristics over time.

We also provide a table detailing the overall estimates and estimates by demographic characteristics (gender, age, race-ethnicity, education, household income, and Massachusetts region). Crude rates, age-adjusted rates, and their 95% confidence intervals are presented in the table. The crude rate is the actual proportion of respondents in a particular category. Age adjustment is done in order to eliminate differences in the age distribution when comparing different geographies (for example, a community rate compared with the statewide rate) or across time (for example, Massachusetts in 1990 compared to Massachusetts in 2001). Readers may wish to use the crude rate to make general statements about the magnitude of an event, and use the age-adjusted rate when comparing different rates. Also, please note that the crude rate for a specific age group is also known as the "age-specific" rate.

Race-ethnicity categories in this report include White, Black, Hispanic, and Asian. When referring to White, Black or Asian, these categories include only non-Hispanic respondents. All respondents reporting Hispanic ethnicity are included in the Hispanic category.

Statistical significance testing was not conducted to establish significant differences between groups. References to increases or decreases in rates refer to variations in data and not to the statistical significance of these variations. The reader might note that non-overlapping confidence intervals indicate statistical significance, but overlapping confidence intervals do not necessarily mean that differences are not statistically significant.

BRFSS data are weighted to reflect both the probability that an individual was selected to participate in the survey and differential participation by sex, age and race/ethnicity. There may be slight differences in estimates or rankings between this report and previous publications due to different weighting methods.

In the Appendix, whenever possible, we provide a comparison of Massachusetts results to national data and Healthy People 2010 Objectives*. For national comparisons, we provide the median* percentage and the range of estimates for all fifty states, the District of Columbia, and Puerto Rico. We also provide a ranking of Massachusetts relative to other states, although this ranking does not take into account the degree of uncertainty of the estimates within each state due to random sampling variation. Rankings are based on the lowest risk or healthiest behavior, so that a rank of 1st = best and 52nd = worst.

This report provides estimates for 2001 data, compares our state with U.S. data and Healthy People 2010 Objectives, and highlights comparisons of interest.

* See Technical Notes, page 76

DEMOGRAPHIC PROFILE OF MASSACHUSETTS BRFSS SURVEY RESPONDENTS

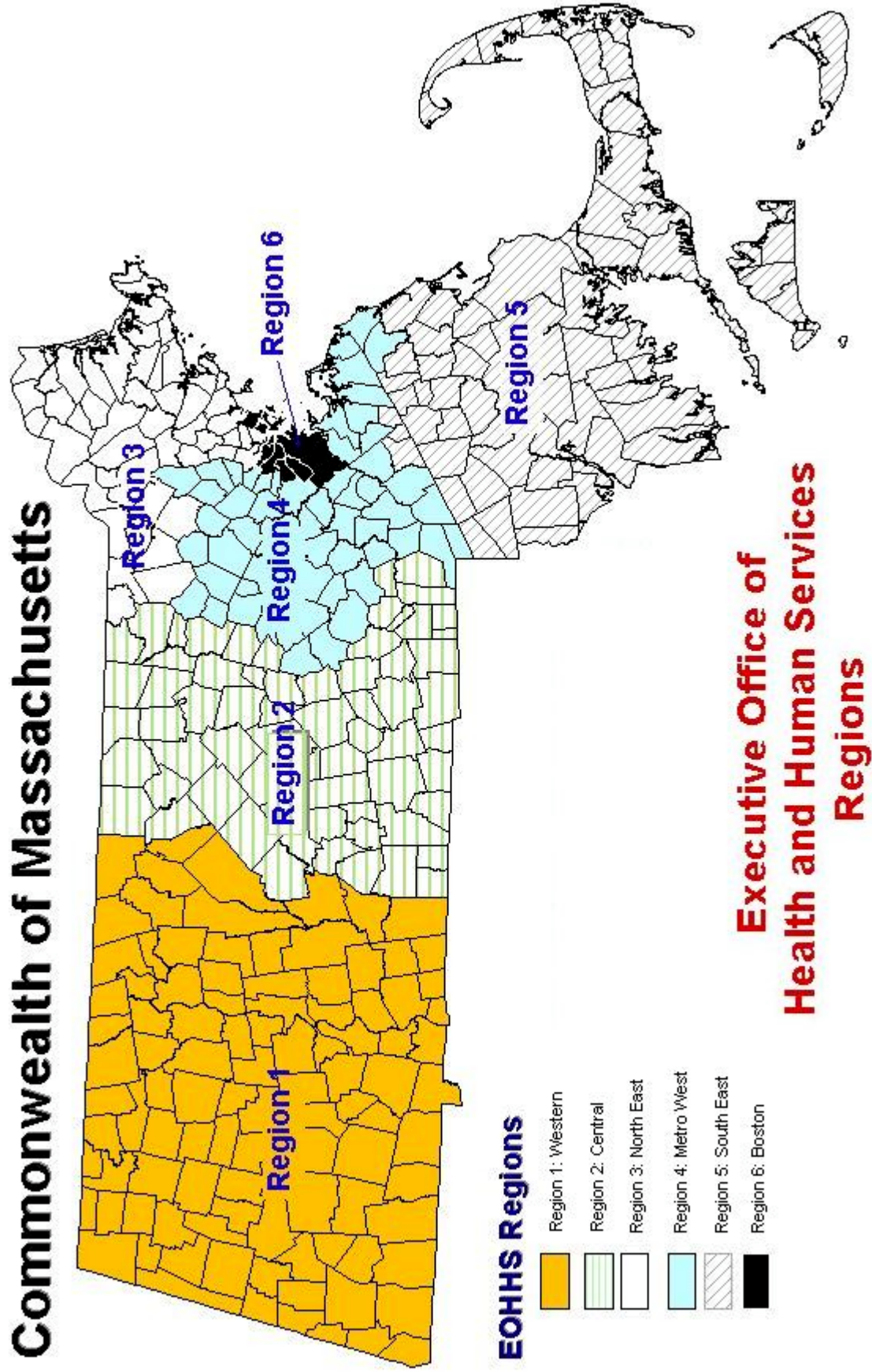
DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS IN THE MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2001		
	UNWEIGHTED SAMPLE SIZE* N	WEIGHTED PERCENT (%)**
OVERALL	8,628	100
GENDER		
MALE	3,561	47.4
FEMALE	5,064	52.6
AGE GROUP		
18–24	661	13.0
25–34	1,720	18.0
35–44	1,981	20.9
45–54	1,649	17.9
55–64	1,008	12.0
65–74	808	10.7
75 AND OLDER	660	7.6
RACE-ETHNICITY***		
WHITE	7,036	85.0
BLACK	409	3.5
HISPANIC	781	7.8
ASIAN	208	2.8
OTHER	84	0.9
EDUCATION		
< HIGH SCHOOL	782	8.2
HIGH SCHOOL	2,266	26.7
COLLEGE 1–3 YRS	2,068	25.0
COLLEGE 4+ YRS	3,481	40.1
HOUSEHOLD INCOME		
<\$25,000	1,779	20.8
\$25–34,999	948	12.2
\$35–49,999	1,227	16.1
\$50–74,999	1,326	19.3
\$75,000+	2,056	31.7
REGION		
I–WESTERN	1,351	14.3
II–CENTRAL	1,327	13.6
III–NORTH EAST	1,516	18.1
IV–METRO WEST	1,621	23.6
V–SOUTH EAST	1,577	19.3
VI–BOSTON	1,236	11.1

* Numbers may not total due to missing data.

** See BRFSS Methodology in Appendix.

*** White, Black and Asian race categories refer to non-Hispanic.

Commonwealth of Massachusetts



SECTION 1: OVERALL HEALTH MEASURES

Section 1.1: Overall Health Status

All respondents were asked to describe their overall health status as excellent, very good, good, fair or poor. Respondents were also asked on how many days during the past month their mental health was not good. The percentage of adults who reported their overall health as fair or poor and the percentage of adults who reported poor mental health for 15 or more days are presented.

FAIR OR POOR HEALTH (Table 1.1)

- 12% of Massachusetts adults described their overall health as fair or poor
- The percentage of adults who reported fair or poor health increased with increasing age, after age 25
- Hispanics were more likely to report fair or poor health than all other race-ethnicity groups
- The percentage of adults who reported fair or poor health decreased with increasing levels of education and income
- Since 1992, the percentage of adults who reported fair or poor health has increased (Figure 1.1)
- Adults in Boston were nearly twice as likely as those in the Metro West region of the state to report fair or poor health

15+ POOR MENTAL HEALTH DAYS IN PAST MONTH (Table 1.1)

- Nearly 10% of Massachusetts adults reported experiencing 15 or more days of poor mental health in the past month
- Women were more likely than men to report 15 or more days of poor mental health in the past month
- Asians were less likely to report 15 or more days of poor mental health in the past month than all other race-ethnicity groups
- Adults who completed college were less likely to report 15 or more days of poor mental health than adults of lower education levels
- Adults with higher household income were less likely to report 15 or more days of poor mental health in the past month compared to adults in lower income households

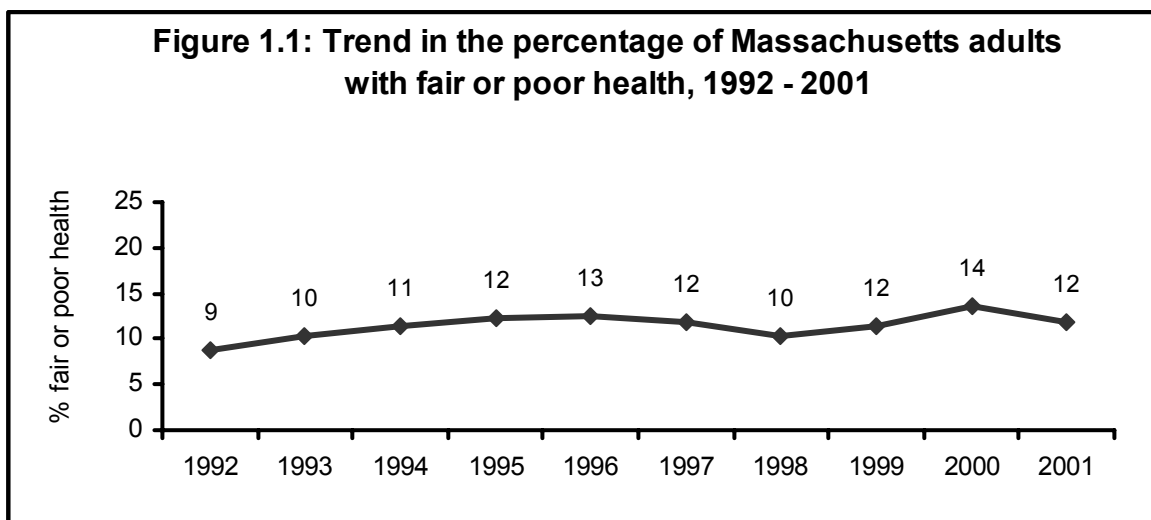


TABLE 1.1 - HEALTH STATUS AMONG MASSACHUSETTS ADULTS, 2001

	FAIR OR POOR HEALTH			15+ POOR MENTAL HEALTH DAYS		
	CRUDE %	AGE-ADJUSTED % 95% CI		CRUDE %	AGE-ADJUSTED % 95% CI	
OVERALL	12.1	12.0 (11.2-12.8)		9.6	9.7 (8.9-10.4)	
GENDER						
MALE	11.2	11.6 (10.3-12.9)		7.8	7.7 (6.6 - 8.9)	
FEMALE	12.9	12.4 (11.3-13.5)		11.2	11.6 (10.5-12.6)	
AGE GROUP						
18-24	7.8	(5.3-10.3)*		13.7	(10.5-17.0)*	
25-34	5.2	(4.0 - 6.5)*		9.0	(7.4-10.5)*	
35-44	8.2	(6.7 - 9.8)*		10.3	(8.6-12.0)*	
45-54	11.6	(9.7-13.6)*		9.8	(8.0-11.5)*	
55-64	16.3	(13.8-18.9)*		9.1	(7.1-11.2)*	
65-74	22.0	(18.7-25.3)*		6.7	(4.6 - 8.9)*	
75 AND OLDER	28.2	(24.3-32.1)*		6.7	(4.5 - 8.9)*	
RACE-ETHNICITY**						
WHITE	10.9	10.3 (9.5-11.2)		9.5	9.7 (8.8-10.6)	
BLACK	14.3	17.3 (12.8-21.9)		10.4	11.2 (7.6-14.9)	
HISPANIC	26.0	32.8 (28.5-37.0)		12.5	14.4 (10.9-17.9)	
ASIAN	5.9	6.8 (2.9-10.8)		2.9	2.2 (0.2 - 4.2)	
EDUCATION						
< HIGH SCHOOL	35.0	34.6 (30.4-38.8)		18.2	18.5 (15.0-21.9)	
HIGH SCHOOL	16.3	15.3 (13.5-17.1)		12.2	12.7 (11.0-14.4)	
COLLEGE 1-3 YRS	11.4	11.7 (10.0-13.3)		10.2	10.3 (8.7-11.9)	
COLLEGE 4+ YRS	5.2	5.7 (4.6 - 6.7)		5.8	5.9 (4.7 - 7.0)	
HOUSEHOLD INCOME						
<\$25,000	26.7	27.7 (25.0-30.3)		14.8	17.4 (15.0-19.8)	
\$25-34,999	14.8	14.9 (12.0-17.9)		10.5	10.5 (8.2-12.8)	
\$35-49,999	10.0	10.3 (8.0-12.6)		9.4	9.6 (7.5-11.7)	
\$50-74,999	5.2	6.0 (4.1 - 7.8)		7.3	7.0 (5.3 - 8.7)	
\$75,000+	4.2	4.7 (3.2 - 6.3)		6.4	6.6 (4.9 - 8.3)	
REGION						
I-WESTERN	12.6	11.7 (9.8-13.6)		12.0	12.2 (10.0-14.3)	
II-CENTRAL	11.9	12.1 (9.9-14.3)		10.4	10.5 (8.4-12.5)	
III-NORTH EAST	12.1	11.9 (10.0-13.8)		8.0	8.1 (6.4 - 9.7)	
IV-METRO WEST	9.1	9.0 (7.2-10.8)		9.0	9.3 (7.4-11.2)	
V-SOUTH EAST	13.8	13.1 (11.1-15.0)		10.1	10.4 (8.5-12.3)	
VI-BOSTON	15.4	18.5 (15.7-21.3)		8.4	9.1 (7.1-11.1)	

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

Section 1.2: Quality of Life

All respondents were asked on how many days during the last 30 days they felt sad, blue or depressed. Respondents were also asked how many days during the last 30 days pain had made it hard to do usual activities such as self-care, work or recreation. The percentage of adults who reported feeling depressed for 15 or more days in the past month and the percentage of adults who reported pain for 15 or more days in the past month are presented.

15+ DAYS DEPRESSED (Table 1.2)

- 7% of Massachusetts adults reported feeling sad or depressed for 15 or more days in the past month
- The percentage of adults who felt sad or depressed for 15 or more days in the past month varied little across age groups
- Black and Hispanic adults were more likely to have felt sad or depressed for 15 or more days in the past month than Asian and White adults
- The percentage of adults who felt sad or depressed for 15 or more days in the past month decreased with increasing education and income
- Since 1998, there has been no significant change in the percentage of adults who felt sad or depressed for more than half the previous month (Figure 1.2)

15+ DAYS PAIN (Table 1.2)

- 7% of Massachusetts adults reported physical pain for 15 or more days in the past month
- Asians were less likely to have experienced pain for 15 or more days in the past month than all other race-ethnicity groups
- The percentage of adults who reported pain for 15 or more days in the past month decreased with increasing education and income

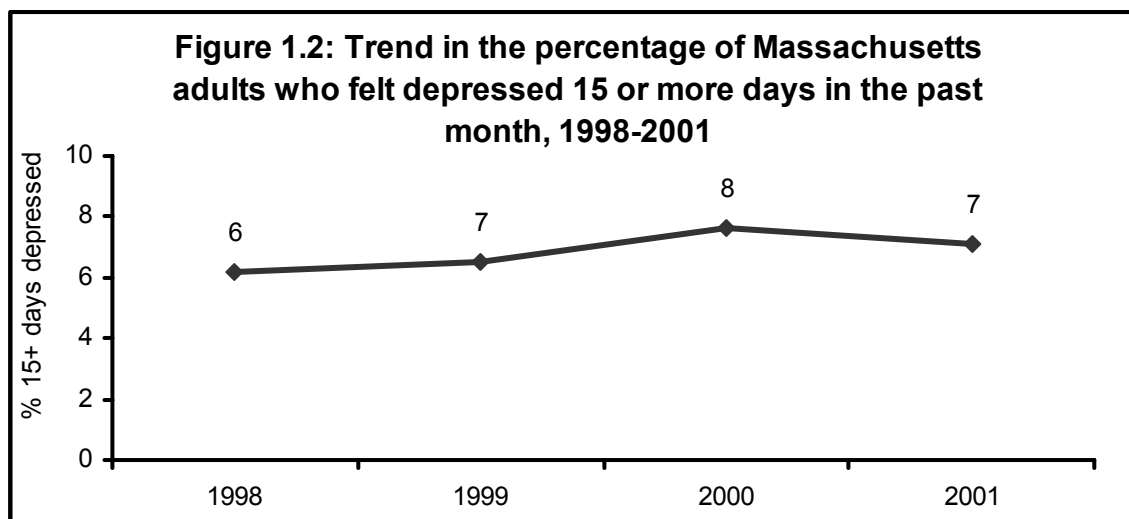


TABLE 1.2 - QUALITY OF LIFE AMONG MASSACHUSETTS ADULTS, 2001

	15+ DAYS DEPRESSED		15+ DAYS IN PAIN	
	CRUDE %	AGE-ADJUSTED % 95% CI	CRUDE %	AGE-ADJUSTED % 95% CI
OVERALL	7.1	7.2 (6.5 - 7.9)	6.8	6.8 (6.1 - 7.4)
GENDER				
MALE	5.9	5.9 (4.9 - 7.0)	6.1	6.2 (5.2 - 7.2)
FEMALE	8.3	8.4 (7.5 - 9.3)	7.4	7.3 (6.4 - 8.1)
AGE GROUP				
18-24	7.2	(4.9 - 9.4)*	2.7	(1.2 - 4.1)*
25-34	5.2	(4.1 - 6.4)*	3.8	(2.8 - 4.8)*
35-44	7.8	(6.3 - 9.3)*	6.5	(5.0 - 8.0)*
45-54	9.1	(7.3-10.9)*	8.6	(6.8-10.4)*
55-64	7.5	(5.6 - 9.3)*	10.2	(8.2-12.3)*
65-74	6.4	(4.1 - 8.6)*	7.9	(5.6-10.1)*
75 AND OLDER	6.4	(4.2 - 8.6)*	10.8	(8.0-13.6)
RACE-ETHNICITY**				
WHITE	6.8	6.9 (6.1 - 7.6)	7.0	6.8 (6.1 - 7.5)
BLACK	9.5	10.7 (6.8-14.5)	5.2	6.4 (3.2 - 9.5)
HISPANIC	10.8	13.7 (10.3-17.2)	5.2	7.6 (4.9-10.3)
ASIAN	1.1	1.2 (0.2 - 5.4)	2.1	2.3 (0.8 - 6.5)
EDUCATION				
< HIGH SCHOOL	16.2	16.5 (13.4-19.6)	13.1	13.7 (10.6-16.8)
HIGH SCHOOL	9.4	9.8 (8.2-11.3)	8.6	8.7 (7.2-10.1)
COLLEGE 1-3 YRS	7.2	7.4 (6.1 - 8.7)	7.4	7.7 (6.3 - 9.0)
COLLEGE 4+ YRS	3.9	4.0 (3.0 - 4.9)	4.0	4.0 (3.0 - 5.0)
HOUSEHOLD INCOME				
<\$25,000	13.7	16.5 (14.1-18.9)	12.9	15.1 (12.8-17.4)
\$25-34,999	8.0	8.6 (6.2-11.1)	8.7	9.3 (6.5-12.0)
\$35-49,999	5.6	5.7 (4.3 - 7.2)	5.6	5.8 (4.3 - 7.4)
\$50-74,999	4.6	4.4 (3.0 - 5.7)	4.1	3.7 (2.6 - 4.9)
\$75,000+	3.6	3.0 (2.1 - 4.0)	3.9	3.2 (2.2 - 4.2)
REGION				
I-WESTERN	10.7	10.7 (8.6-12.7)	8.1	8.0 (6.2 - 9.7)
II-CENTRAL	7.8	7.9 (6.0 - 9.9)	8.1	8.3 (6.3-10.2)
III-NORTH EAST	6.4	6.3 (5.0 - 7.7)	7.5	7.5 (5.9 - 9.1)
IV-METRO WEST	5.7	5.7 (4.2 - 7.1)	4.9	4.8 (3.5 - 6.0)
V-SOUTH EAST	6.1	6.2 (4.8 - 7.7)	7.9	7.7 (6.1 - 9.4)
VI-BOSTON	7.8	8.3 (6.4-10.2)	4.6	5.9 (4.2 - 7.5)

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

SECTION 2: HEALTH CARE ACCESS AND UTILIZATION

Section 2.1: Health Care Access

All respondents were asked if they currently had health insurance. Individuals who indicated they had no insurance were asked a follow-up question to make certain they considered all types of health care coverage. Our analysis of no health insurance is limited to individuals ages 18-64. All respondents were also asked whether there was one person that they considered to be their personal doctor or health care provider.

NO HEALTH INSURANCE, AGES 18-64 (Table 2.1)

- 7% of Massachusetts adults ages 18-64 reported being currently without health insurance
- Men were more likely to have no health insurance than women
- Adults ages 18-34 were more likely to have no health insurance than older adults
- White non-Hispanic adults were less likely to have no health insurance compared to all other race-ethnicity groups
- The percentage of adults reporting no health insurance decreased with increasing education and income
- Since 1996, the percentage of adults ages 18 – 64 with no health insurance has decreased (Figure 2.1)

HAVE PERSONAL DOCTOR (Table 2.1)

- 87% of Massachusetts adults reported having a personal doctor
- Women were more likely to have a personal doctor than men
- Hispanics were less likely to have a personal doctor than White, non-Hispanics
- Adults in the lowest income category were less likely to have a personal doctor than those in the higher income categories
- Adults in the Boston region of the state were the least likely to have a personal doctor

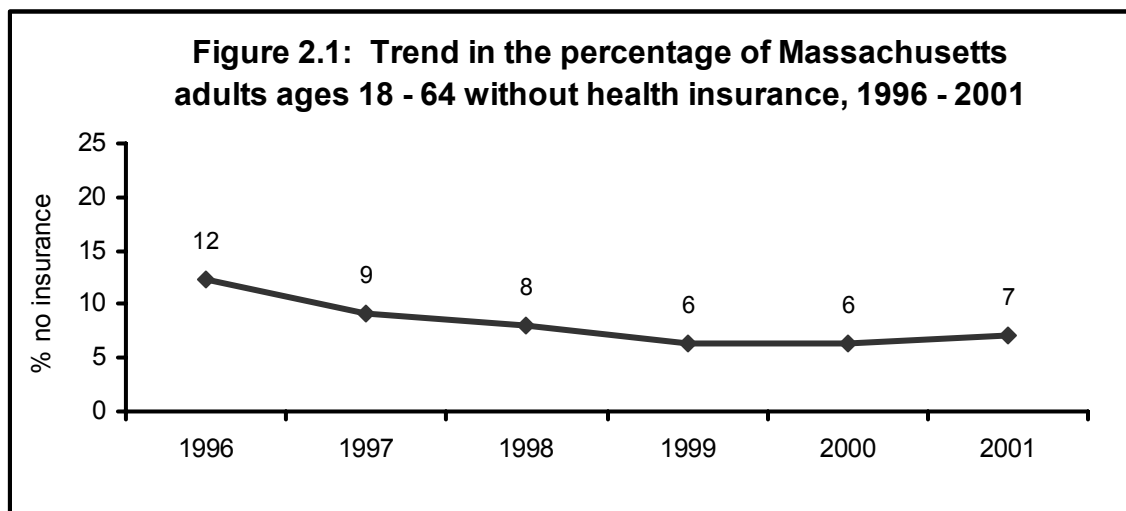


TABLE 2.1 – HEALTH CARE ACCESS AMONG MASSACHUSETTS ADULTS, 2001

	NO HEALTH INSURANCE, AGES 18-64			HAVE PERSONAL DOCTOR		
	CRUDE %	AGE-ADJUSTED % 95% CI		CRUDE %	AGE-ADJUSTED % 95% CI	
OVERALL	7.2	7.2 (6.4 - 7.9)		86.8	86.6 (85.7-87.5)	
GENDER						
MALE	8.5	8.4 (7.2 - 9.6)		82.1	82.4 (81.0-83.8)	
FEMALE	5.9	6.0 (5.0 - 6.9)		91.1	90.8 (89.7-91.8)	
AGE GROUP						
18-24	14.6	(11.3-17.8)*		71.2	(67.1-75.3)*	
25-34	9.2	(7.4-10.9)*		79.3	(76.9-81.7)*	
35-44	5.8	(4.5 - 7.1)*		87.2	(85.4-88.9)*	
45-54	4.0	(2.9 - 5.0)*		91.2	(89.6-92.8)*	
55-64	3.5	(2.3- 4.7)*		93.4	(91.7-95.0)*	
65-74				96.1	(94.7-97.5)*	
75 AND OLDER				95.7	(94.0-97.3)*	
RACE-ETHNICITY**						
WHITE	5.8	6.1 (5.2 - 6.9)		88.6	87.9 (87.0-88.9)	
BLACK	11.3	10.9 (7.0-14.8)		80.9	83.5 (79.4-87.5)	
HISPANIC	16.8	15.1 (11.5-18.7)		75.1	78.6 (74.6-82.6)	
ASIAN	10.6	10.6 (4.9-16.2)		77.2	80.5 (70.6-90.3)	
EDUCATION						
< HIGH SCHOOL	17.1	16.3 (12.2-20.4)		83.2	81.5 (77.6-85.3)	
HIGH SCHOOL	11.8	11.4 (9.5-13.4)		84.5	83.8 (81.9-85.7)	
COLLEGE 1-3 YRS	6.7	6.6 (5.2 - 8.0)		88.3	88.3 (86.6-89.9)	
COLLEGE 4+ YRS	3.2	3.2 (2.5 - 3.9)		88.3	87.6 (86.1-89.1)	
HOUSEHOLD INCOME						
<\$25,000	17.9	18.5 (15.6-21.4)		80.2	77.6 (75.0-80.2)	
\$25-34,999	11.1	10.6 (8.0-13.1)		84.6	84.5 (81.8-87.2)	
\$35-49,999	7.0	7.0 (4.8 - 9.2)		88.9	89.0 (87.1-91.0)	
\$50-74,999	3.2	3.5 (2.0 - 5.0)		88.0	88.9 (86.9-90.8)	
\$75,000+	1.6	2.0 (1.0 - 2.9)		90.8	90.2 (88.3-92.1)	
REGION						
I-WESTERN	8.9	9.1 (6.8-11.4)		83.0	82.3 (79.6-85.0)	
II-CENTRAL	5.5	5.5 (3.9 - 7.1)		89.5	89.6 (87.5-91.8)	
III-NORTH EAST	6.8	7.1 (5.3 - 8.9)		89.2	88.7 (86.7-90.6)	
IV-METRO WEST	4.3	4.4 (3.0 - 5.9)		88.8	88.1 (86.2-90.0)	
V-SOUTH EAST	8.3	8.3 (6.3-10.3)		87.6	87.1 (85.1-89.1)	
VI-BOSTON	11.8	10.4 (7.9-12.8)		79.1	83.1 (80.7-85.4)	

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

Section 2.2: Dental Health Care

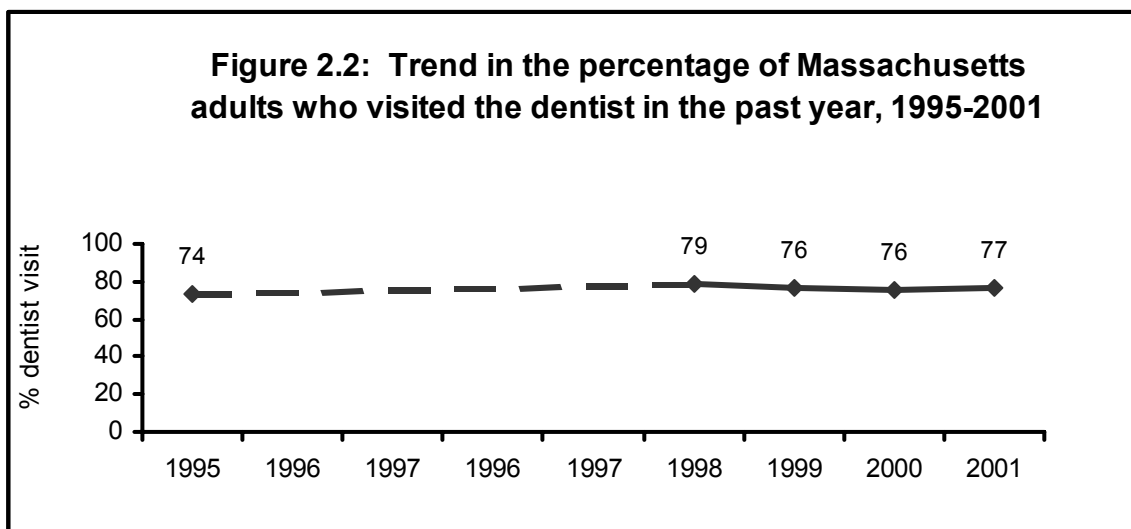
All respondents were asked to report when they had last visited a dentist. All adults were also asked how many teeth they had missing due to decay or gum disease.

DENTAL VISIT IN PAST YEAR (Table 2.2)

- 77% of Massachusetts adults reported that they had been to the dentist in the past year
- Women were more likely than men to have been to the dentist in the past year
- The percentage of adults who had been to the dentist in the past year increased with increasing education and income
- Since 1995, the percentage of adults who reported going to the dentist in the past year did not change significantly (Figure 2.2)

SIX OR MORE TEETH MISSING DUE TO DISEASE (Table 2.2)

- 18% of Massachusetts adults reported having six or more teeth missing due to disease or decay
- The percentage of adults with six or more teeth missing due to disease or decay increased with increasing age
- Asian adults were less likely to have six or more teeth missing due to disease or decay than all other race/ethnicity groups
- The percentage of adults who had six or more teeth missing due to disease or decay decreased with increasing education and income



Note: dotted line signifies years in which the question was not asked.

TABLE 2.2 – DENTAL HEALTH CARE AMONG MASSACHUSETTS ADULTS, 2001

	DENTAL VISIT IN PAST YEAR			6 OR MORE TEETH MISSING FROM DISEASE		
	CRUDE %	AGE-ADJUSTED % 95% CI		CRUDE %	AGE-ADJUSTED % 95% CI	
OVERALL	77.1	76.9 (75.2-78.5)		17.5	17.5 (16.1-18.8)	
GENDER						
MALE	75.0	74.6 (72.0-77.1)		16.0	17.4 (15.2-19.5)	
FEMALE	79.0	78.9 (76.8-81.0)		18.8	17.5 (15.8-19.1)	
AGE GROUP						
18–24	75.4	(69.4-81.4)*		0.8	(0.0 - 1.9)*	
25–34	74.8	(71.0-78.5)*		3.0	(1.5 - 4.6)*	
35–44	79.6	(76.4-82.9)*		8.1	(5.6-10.5)*	
45–54	79.6	(76.0-83.3)*		17.2	(13.6-20.8)*	
55–64	79.6	(75.1-84.0)*		28.8	(23.9-33.7)*	
65–74	75.1	(70.0-80.2)*		48.8	(42.7-55.0)*	
75 AND OLDER	66.3	(59.9-72.8)*		51.1	(44.0-58.2)*	
RACE-ETHNICITY**						
WHITE	78.3	78.2 (76.4-80.0)		18.2	17.0 (15.6-18.4)	
BLACK	71.8	68.5 (59.4-77.7)		14.7	18.9 (12.6-25.3)	
HISPANIC	69.6	70.5 (63.5-77.5)		16.8	26.4 (21.2-31.6)	
ASIAN	74.3	82.0 (74.1-90.0)		0.8	0.5 (0.1 - 3.5)	
EDUCATION						
< HIGH SCHOOL	57.9	58.6 (51.5-65.7)		36.6	32.6 (26.6-38.6)	
HIGH SCHOOL	71.0	71.2 (67.9-74.5)		27.3	25.7 (22.9-28.4)	
COLLEGE 1–3 YRS	77.8	77.6 (74.4-80.8)		16.6	16.8 (14.1-19.5)	
COLLEGE 4+ YRS	84.2	84.2 (81.8-86.7)		7.9	9.3 (7.3-11.2)	
HOUSEHOLD INCOME						
<\$25,000	61.6	62.2 (57.6-66.9)		32.8	28.4 (24.4-32.5)	
\$25–34,999	72.9	72.1 (67.0-77.1)		24.0	24.9 (20.3-29.6)	
\$35–49,999	75.4	75.2 (70.7-79.7)		15.8	17.3 (13.8-20.8)	
\$50–74,999	82.1	82.9 (79.2-86.6)		8.6	11.1 (7.7-14.4)	
\$75,000+	87.7	89.0 (86.4-91.6)		8.8	10.0 (7.0-13.0)	
REGION						
I–WESTERN	76.2	76.2 (72.0-80.4)		20.4	19.8 (16.2-23.4)	
II–CENTRAL	76.8	75.8 (71.7-80.0)		16.6	18.7 (15.2-22.2)	
III–NORTH EAST	75.9	75.0 (70.6-79.3)		17.7	17.2 (14.3-20.1)	
IV–METRO WEST	80.0	80.1 (76.6-83.7)		14.0	12.8 (10.3-15.2)	
V–SOUTH EAST	75.8	76.0 (72.0-79.9)		23.7	21.9 (18.4-25.4)	
VI–BOSTON	76.5	76.4 (72.1-80.7)		11.2	15.5 (12.1-19.0)	

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

SECTION 3: Risk Factors and Preventive Behaviors

Section 3.1: Tobacco Use

Respondents who smoked 100 cigarettes in their lifetime and who currently smoked were defined as current smokers. All current smokers who reported smoking 21 or more cigarettes a day (more than one pack) were considered to be heavy smokers.

CURRENT SMOKER (Table 3.1)

- 20% of Massachusetts adults were current smokers
- Current smoking did not differ by gender
- Hispanic and Asian adults were less likely to be current smokers than White or Black adults
- Current smoking decreased with increasing age, education, and income
- Current smoking was lowest in the Metro West region (15%), and highest in the Western Region (24%)
- Since 1986, the percentage of adults who currently smoke has decreased (Figure 3.1)

HEAVY SMOKER (Table 3.1)

- 2% of Massachusetts adults were heavy smokers
- Men were more likely to be heavy smokers than women
- White adults were more likely to be heavy smokers than all other race-ethnicity groups
- Heavy smoking decreased with increasing education

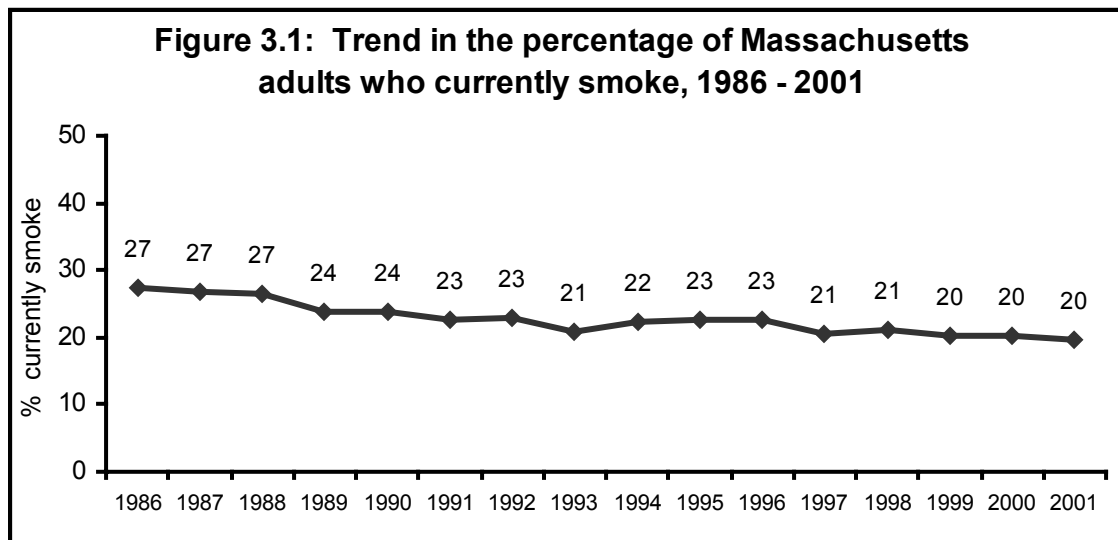


TABLE 3.1 - TOBACCO USE AMONG MASSACHUSETTS ADULTS, 2001

	CURRENT SMOKER			HEAVY SMOKER		
	CRUDE %	AGE-ADJUSTED % 95% CI		CRUDE %	AGE-ADJUSTED % 95% CI	
OVERALL	19.5	19.8 (18.8-20.8)		2.2	2.2 (1.8 - 2.6)	
GENDER						
MALE	20.4	20.2 (18.6-21.7)		2.8	2.9 (2.2 - 3.6)	
FEMALE	18.7	19.4 (18.1-20.7)		1.6	1.6 (1.2 - 2.1)	
AGE GROUP						
18-24	28.0	(23.8-32.1)*		0.8	(0.1 - 1.6)*	
25-34	24.2	(21.8-26.6)*		1.7	(1.0 - 2.4)*	
35-44	22.3	(20.1-24.5)*		3.3	(2.3 - 4.4)*	
45-54	19.7	(17.4-22.0)*		2.3	(1.3 - 3.3)*	
55-64	15.9	(13.3-18.5)*		3.5	(2.2 - 4.8)*	
65-74	10.9	(8.6-13.1)*		2.1	(0.9 - 3.2)*	
75 AND OLDER	5.3	(3.5 - 7.1)*		0.5	(0.0 - 1.1)*	
RACE-ETHNICITY**						
WHITE	19.9	20.7 (19.6-21.9)		2.5	2.5 (2.1 - 3.0)	
BLACK	21.5	21.4 (16.3-26.5)		0.1	0.1 (0.0 - 0.7)	
HISPANIC	14.5	13.7 (10.5-16.9)		0.5	0.6 (0.2 - 2.0)	
ASIAN	13.4	10.2 (5.9-14.6)		†	† --	
EDUCATION						
< HIGH SCHOOL	27.5	30.0 (25.7-34.3)		4.2	5.1 (3.2 - 7.1)	
HIGH SCHOOL	27.3	29.1 (26.8-31.4)		3.7	4.1 (3.0 - 5.1)	
COLLEGE 1-3 YRS	22.2	22.7 (20.6-24.8)		2.0	2.2 (1.4 - 2.9)	
COLLEGE 4+ YRS	11.1	11.6 (10.2-13.0)		0.9	0.9 (0.5 - 1.3)	
HOUSEHOLD INCOME						
<\$25,000	25.2	29.5 (26.7-32.3)		3.0	3.8 (2.6 - 5.0)	
\$25-34,999	28.4	30.5 (26.9-34.1)		3.1	3.4 (1.5 - 5.3)	
\$35-49,999	23.1	23.0 (20.1-26.0)		3.0	3.1 (2.0 - 4.2)	
\$50-74,999	18.9	18.1 (15.6-20.6)		2.2	2.4 (1.2 - 3.5)	
\$75,000+	13.3	13.2 (11.2-15.1)		1.3	1.1 (0.5 - 1.7)	
REGION						
I-WESTERN	24.3	25.3 (22.4-28.2)		2.7	2.9 (1.8 - 4.0)	
II-CENTRAL	22.0	21.8 (19.1-24.5)		2.7	2.8 (1.4 - 4.1)	
III-NORTH EAST	18.4	18.7 (16.3-21.1)		2.4	2.4 (1.5 - 3.3)	
IV-METRO WEST	15.0	15.5 (13.4-17.6)		2.0	2.0 (1.1 - 2.9)	
V-SOUTH EAST	21.5	22.9 (20.4-25.4)		1.9	2.0 (1.3 - 2.6)	
VI-BOSTON	18.0	17.9 (15.2-20.6)		1.3	1.7 (0.7 - 2.7)	

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

† Insufficient numbers.

Section 3.2: Smoking Cessation

All current smokers were asked if they had intentionally quit smoking for one day or longer in the past year. All current smokers were also asked if they were planning to quit smoking in the next 30 days.

QUIT ATTEMPT (Table 3.2)

- 57% of Massachusetts current smokers reported quitting for at least one day in the past year
- The percentage of smokers who tried to quit in the past year decreased with increasing age.
- The percentage of smokers who tried to quit in the past year was consistent across levels of education
- Since 1991, the percentage of adults who reported quitting for at least one day in the past year has increased slightly (Figure 3.2)

PLANNING TO QUIT (Table 3.2)

- 41% of Massachusetts current smokers were planning to quit in the next 30 days
- Men were more likely to be planning to quit in the next 30 days than women
- The percentage of smokers planning to quit in the next 30 days was consistent across levels of education and income

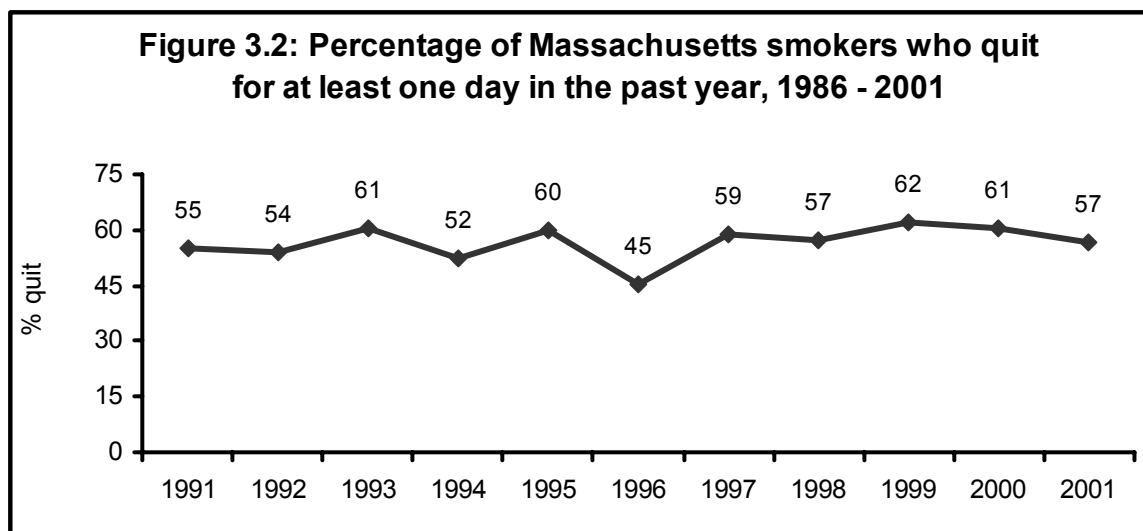


TABLE 3.2 - SMOKING CESSATION AMONG MASSACHUSETTS ADULTS, 2001

	QUIT ATTEMPT			PLANNING TO QUIT		
	CRUDE %	AGE-ADJUSTED % 95% CI		CRUDE %	AGE-ADJUSTED % 95% CI	
OVERALL	56.6	54.6 (51.6-57.5)		41.1	41.3 (38.2-44.3)	
GENDER						
MALE	56.0	53.1 (48.5-57.7)		43.4	44.9 (40.0-49.7)	
FEMALE	57.2	55.9 (52.2-59.7)		38.7	38.6 (34.7-42.4)	
AGE GROUP						
18-24	64.8	(56.7-72.8)*		38.2	(29.5-46.9)*	
25-34	59.5	(53.8-65.2)*		40.3	(34.6-46.0)*	
35-44	55.6	(50.0-61.2)*		40.3	(34.7-46.0)*	
45-54	58.8	(52.2-65.4)*		45.1	(38.3-51.8)*	
55-64	48.2	(39.4-56.9)*		43.6	(34.6-52.7)*	
65-74	39.9	(29.2-50.7)*		43.5	(31.8-55.2)*	
75 AND OLDER	†	--		†	--	
RACE-ETHNICITY**						
WHITE	55.2	53.7 (50.5-56.8)		39.6	40.0 (36.7-43.2)	
BLACK	56.9	55.7 (40.8-70.5)		56.8	55.8 (40.6-71.1)	
HISPANIC	63.3	58.8 (46.3-71.4)		55.4	49.8 (40.4-59.1)	
ASIAN	†	† --		†	† --	
EDUCATION						
< HIGH SCHOOL	53.1	51.8 (43.5-60.2)		39.9	40.3 (31.9-48.8)	
HIGH SCHOOL	53.9	52.2 (47.4-57.0)		38.4	39.2 (34.3-44.1)	
COLLEGE 1-3 YRS	61.5	57.7 (51.8-63.5)		45.6	44.3 (37.8-50.7)	
COLLEGE 4+ YRS	56.8	55.2 (49.1-61.2)		40.4	39.3 (33.0-45.5)	
HOUSEHOLD INCOME						
<\$25,000	55.7	54.2 (48.8-59.6)		43.7	42.5 (36.9-48.1)	
\$25-34,999	57.7	55.1 (47.7-62.5)		41.5	41.1 (33.7-48.4)	
\$35-49,999	59.7	61.6 (54.2-69.0)		36.8	40.3 (32.3-48.2)	
\$50-74,999	50.5	49.1 (40.3-57.8)		44.9	48.7 (39.8-57.7)	
\$75,000+	60.3	61.7 (53.8-69.7)		41.0	41.0 (32.0-50.0)	
REGION						
I-WESTERN	52.9	50.1 (43.5-56.7)		42.2	41.4 (34.1-48.6)	
II-CENTRAL	60.5	57.8 (50.5-65.1)		42.1	43.1 (35.6-50.5)	
III-NORTH EAST	55.0	54.6 (48.1-61.1)		36.9	37.8 (30.7-44.8)	
IV-METRO WEST	55.3	55.4 (48.2-62.7)		44.4	44.1 (36.6-51.6)	
V-SOUTH EAST	60.2	57.8 (51.3-64.2)		42.0	43.7 (37.0-50.5)	
VI-BOSTON	54.7	52.1 (43.8-60.4)		36.9	35.8 (28.3-43.3)	

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

† Insufficient numbers.

Section 3.3: Environmental Tobacco Smoke

All respondents were asked about their attitudes and behaviors relating to environmental tobacco smoke exposure. Respondents were asked to describe the rules about smoking in their home. Respondents were also asked whether they opposed smoking in a variety of public places including restaurants.

LIVE IN A HOUSEHOLD WHERE SMOKING IS NOT ALLOWED (Table 3.3)

- 69% of Massachusetts adults reported living in a household where smoking was not allowed
- Hispanics were more likely to live in a household where smoking was not allowed than White and Black adults
- Adults who completed college were more likely to live in a household where smoking was not allowed than adults of lower education levels
- The percentage of adults who lived in a household where smoking was not allowed increased with increasing income

SUPPORT SMOKEFREE RESTAURANTS (Table 3.3)

- 61% of Massachusetts adults supported smokefree restaurants
- Women were more likely to support smokefree restaurants than men
- White adults were less likely to support smokefree restaurants than Black or Hispanic adults
- Since 1992, the percentage of adults who support a ban on smoking in restaurants has increased (Figure 3.3)

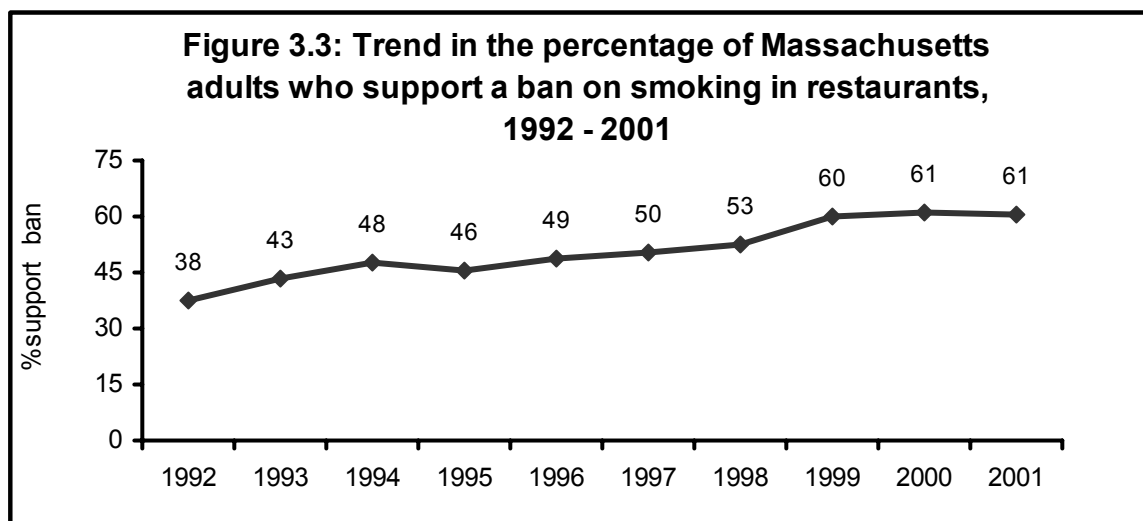


TABLE 3.3 - ENVIRONMENTAL TOBACCO SMOKE AMONG MASSACHUSETTS ADULTS, 2001

	LIVE IN A HOUSEHOLD WHERE SMOKING IS NOT ALLOWED			SUPPORT BAN ON SMOKING IN RESTAURANTS		
	CRUDE %	AGE-ADJUSTED % 95% CI		CRUDE %	AGE-ADJUSTED % 95% CI	
OVERALL	68.9	68.9 (67.7-70.1)		61.3	61.3 (59.8-62.8)	
GENDER						
MALE	68.8	68.8 (67.0-70.6)		57.8	57.8 (55.4-60.1)	
FEMALE	69.0	68.9 (67.3-70.4)		64.5	64.8 (62.8-66.8)	
AGE GROUP						
18-24	64.0	(59.5-68.4)*		58.6	(53.0-64.1)*	
25-34	70.1	(67.5-72.7)*		63.7	(60.5-67.0)*	
35-44	70.5	(68.1-72.8)*		60.6	(57.5-63.6)*	
45-54	69.8	(67.1-72.4)*		64.4	(61.0-67.8)*	
55-64	66.5	(63.1-69.9)*		62.2	(57.9-66.5)*	
65-74	68.7	(65.0-72.4)*		58.5	(53.8-63.3)*	
75 AND OLDER	71.9	(68.1-75.8)*		57.1	(51.8-62.4)*	
RACE-ETHNICITY**						
WHITE	67.6	67.5 (66.2-68.9)		59.7	59.7 (58.0-61.4)	
BLACK	70.9	69.7 (63.8-75.6)		68.6	70.0 (62.6-77.4)	
HISPANIC	80.9	82.0 (78.5-85.4)		75.7	75.4 (70.0-80.8)	
ASIAN	76.1	75.7 (65.1-86.4)		65.2	62.0 (47.4-76.6)	
EDUCATION						
< HIGH SCHOOL	64.6	63.9 (59.5-68.3)		67.3	66.8 (61.5-72.1)	
HIGH SCHOOL	61.4	60.9 (58.4-63.3)		54.4	54.3 (51.3-57.4)	
COLLEGE 1-3 YRS	64.7	64.8 (62.4-67.3)		58.1	58.5 (55.4-61.6)	
COLLEGE 4+ YRS	77.3	76.6 (74.7-78.5)		66.7	66.0 (63.5-68.5)	
HOUSEHOLD INCOME						
<\$25,000	63.0	60.9 (57.9-63.8)		58.5	57.6 (53.8-61.3)	
\$25-34,999	60.9	60.2 (56.4-63.9)		53.7	53.5 (48.7-58.2)	
\$35-49,999	65.5	65.4 (62.1-68.7)		61.5	61.5 (57.4-65.6)	
\$50-74,999	68.3	67.9 (64.6-71.1)		61.1	60.7 (56.7-64.7)	
\$75,000+	77.5	77.2 (74.5-79.8)		65.9	65.9 (62.4-69.4)	
REGION						
I-WESTERN	66.1	66.7 (63.6-69.9)		63.0	63.2 (59.2-67.2)	
II-CENTRAL	66.7	66.7 (63.6-69.8)		62.3	61.7 (57.9-65.5)	
III-NORTH EAST	69.2	68.9 (66.0-71.7)		58.7	58.5 (54.8-62.2)	
IV-METRO WEST	72.9	73.2 (70.6-75.7)		63.9	63.5 (60.1-66.9)	
V-SOUTH EAST	68.8	68.3 (65.5-71.0)		57.1	56.9 (53.3-60.6)	
VI-BOSTON	66.4	66.8 (63.5-70.0)		64.0	64.3 (60.1-68.4)	

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

Section 3.4: Alcohol Use

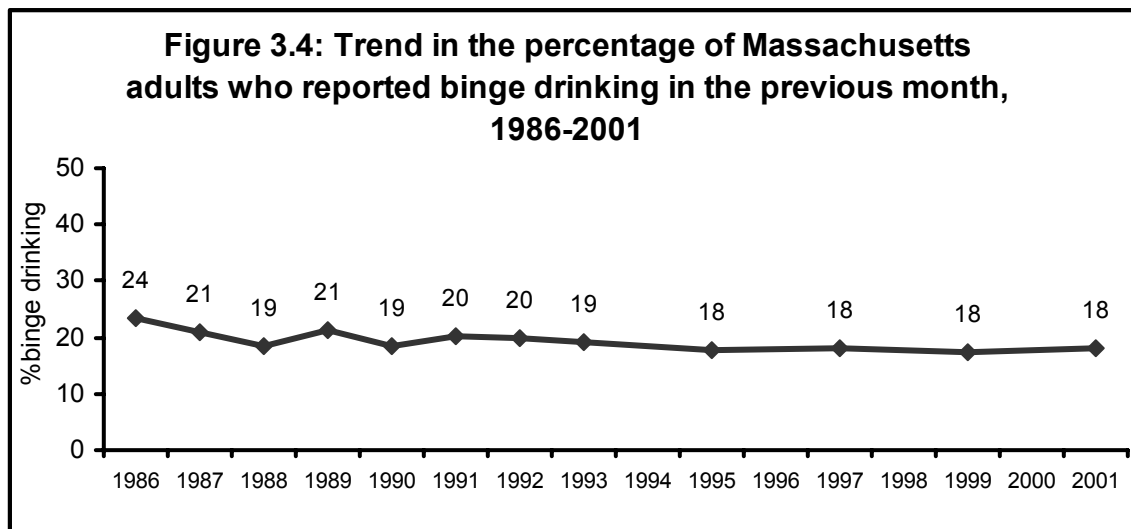
All respondents were asked about their consumption of alcohol in the past month. Binge drinking was defined as consumption of 5 or more drinks at any one occasion in the past month. Heavy drinking* was defined as consumption of 60 or more drinks in the past month for men and consumption of 30 or more drinks in the past month for women.

BINGE DRINKING (Table 3.4)

- 18% of Massachusetts adults reported binge drinking in the past month
- Men were more likely to report binge drinking than women
- The percentage of adults reporting binge drinking decreased with increasing age
- White adults were more likely to report binge drinking than all other race-ethnicity groups
- Since 1986, the percentage of adults who reported binge drinking in the previous month decreased (Figure 3.4)

HEAVY DRINKING (Table 3.4)

- 7% of Massachusetts adults reported heavy drinking in the past month
- Adults ages 18-24 were more likely to report heavy drinking than all other age groups
- White adults were more likely to report heavy drinking than all other race-ethnicity groups



* Previous yearly reports have defined heavy drinking as 60 or more drinks for either men or women. As a result, rates presented in this document may not be comparable to rates published in previous Massachusetts BRFSS reports.

TABLE 3.4 – ALCOHOL USE AMONG MASSACHUSETTS ADULTS , 2001

	BINGE DRINKING			HEAVY DRINKING**		
	CRUDE %	AGE-ADJUSTED % 95% CI		CRUDE %	AGE-ADJUSTED % 95% CI	
OVERALL	18.1	18.4 (17.4-19.4)		7.0	7.0 (6.3 - 7.8)	
GENDER						
MALE	27.1	26.6 (25.0-28.3)		7.9	7.8 (6.6 - 8.9)	
FEMALE	10.0	10.6 (9.4-11.7)		6.2	6.4 (5.4 - 7.3)	
AGE GROUP						
18–24	40.2	(35.6-44.8)*		17.0	(13.2-20.7)*	
25–34	29.3	(26.7-31.9)*		6.3	(4.9 - 7.7)*	
35–44	18.8	(16.6-21.0)*		6.7	(5.1 - 8.3)*	
45–54	12.1	(10.1-14.0)*		5.4	(4.1 - 6.6)*	
55–64	8.2	(6.2-10.2)*		5.1	(3.5 - 6.7)*	
65–74	4.3	(2.6 - 5.9)*		3.7	(2.1 - 5.3)*	
75 AND OLDER	2.3	(1.0 - 3.6)*		4.0	(2.2 - 5.8)*	
RACE-ETHNICITY***						
WHITE	18.8	20.2 (19.1-21.4)		7.5	7.9 (7.0 - 8.7)	
BLACK	15.2	12.7 (8.8-16.6)		3.4	2.9 (1.3 - 4.6)	
HISPANIC	13.4	10.3 (7.8-12.8)		3.5	2.6 (1.2 - 4.0)	
ASIAN	9.6	5.9 (2.8 - 9.1)		6.2	4.0 (1.2 - 6.7)	
EDUCATION						
< HIGH SCHOOL	18.2	20.8 (16.8-24.9)		7.7	8.6 (5.7-11.5)	
HIGH SCHOOL	19.1	20.3 (18.2-22.3)		7.5	7.5 (6.0 - 8.9)	
COLLEGE 1–3 YRS	18.3	17.7 (15.7-19.6)		8.0	7.5 (6.0 - 8.9)	
COLLEGE 4+ YRS	17.4	18.4 (16.8-20.1)		5.9	6.5 (5.2 - 7.7)	
HOUSEHOLD INCOME						
<\$25,000	16.4	17.0 (14.7-19.4)		5.3	5.6 (4.0 - 7.2)	
\$25–34,999	18.4	18.3 (15.4-21.3)		7.6	7.1 (5.1 - 9.0)	
\$35–49,999	19.0	18.4 (15.7-21.1)		7.6	7.6 (5.5 - 9.7)	
\$50–74,999	21.6	20.7 (18.1-23.2)		8.9	9.8 (7.4-12.1)	
\$75,000+	20.7	22.4 (19.9-24.9)		7.6	8.4 (6.4-10.3)	
REGION						
I–WESTERN	19.2	20.1 (17.4-22.7)		7.4	7.4 (5.5 - 9.3)	
II–CENTRAL	16.8	16.5 (14.1-18.9)		5.6	5.5 (4.0 - 7.0)	
III–NORTH EAST	16.9	17.5 (15.2-19.9)		6.6	7.0 (5.1 - 8.8)	
IV–METRO WEST	15.3	16.4 (14.1-18.6)		5.4	5.4 (4.0 - 6.7)	
V–SOUTH EAST	18.9	20.0 (17.4-22.6)		9.2	9.5 (7.4-11.6)	
VI–BOSTON	24.7	19.1 (16.6-21.5)		8.2	6.2 (4.6 - 7.9)	

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** Heavy drinking is defined as consumption of 60 or more drinks in the past month for men and 30 or more drinks for women. Previous yearly reports have defined heavy drinking as 60 or more drinks for either men or women. As a result, rates presented in this document may not be comparable to rates published in previous Massachusetts BRFSS reports.

*** White, Black and Asian race categories refer to non-Hispanic.

Section 3.5: Overweight and Obese

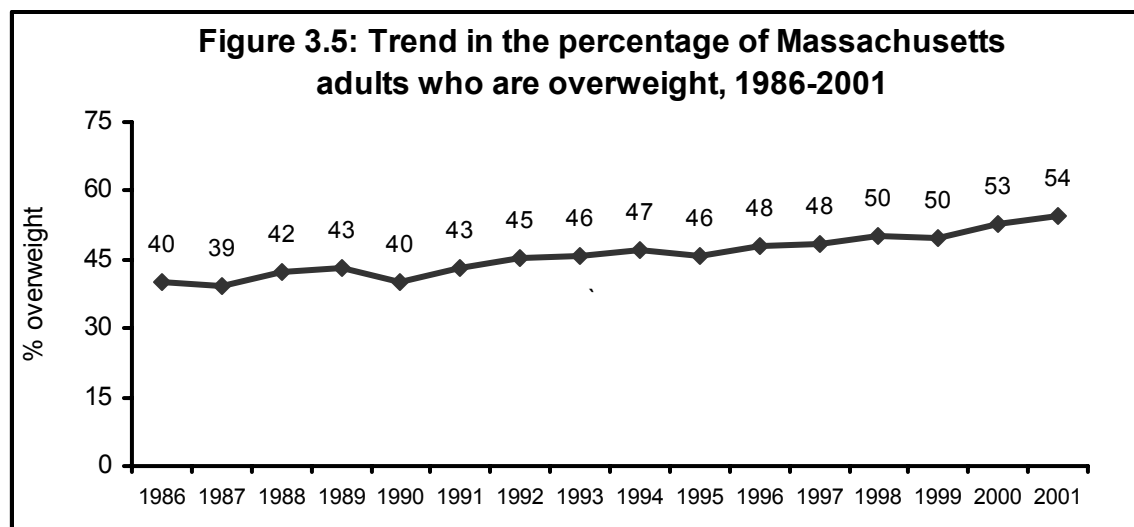
All respondents were asked to report their height and weight. Using the Body Mass Index (BMI)*, which equals weight in kilograms divided by height in meters squared, we categorized all respondents based on their BMI. Using Healthy People 2010 standards (HP 2010), all adults with a BMI > 25.0 or BMI > 30.0 were considered overweight or obese, respectively. For example, a person who is 5' 6" would be considered overweight at 155 pounds and obese at 186 pounds.

OVERWEIGHT (HP2010) (Table 3.5)

- 54% of Massachusetts adults were overweight
- Overall, men were more likely to be overweight than women
- The percentage of adults who were overweight increased with increasing age until age 64, then decreased
- Black and Hispanic adults were more likely to be overweight than White and Asian adults
- The percentage of adults who were overweight decreased with increasing levels of education
- The percentage of adults who were overweight was consistent across all income groups
- Since 1986, the percentage of adults who were overweight has increased (Figure 3.5)

OBESE (HP2010) (Table 3.5)

- 17% of Massachusetts adults were obese
- Adults ages 18-44 and 75 and older were less likely to be obese than adults ages 45-74
- Black and Hispanic adults were more likely to be obese than White and Asian adults
- Asian adults were less likely to be obese than all other race-ethnicity groups
- The percentage of adults who were obese decreased with increasing education



* Weight in kilograms divided by height in meters squared

TABLE 3.5 – OVERWEIGHT AND OBESE AMONG MASSACHUSETTS ADULTS, 2000

	OVERWEIGHT (HP 2010)			OBESE (HP 2010)		
	CRUDE %	AGE-ADJUSTED % 95% CI		CRUDE %	AGE-ADJUSTED % 95% CI	
OVERALL	54.4	54.5 (53.2-55.8)		16.6	16.7 (15.7-17.6)	
GENDER						
MALE	65.4	65.5 (63.7-67.3)		17.4	17.5 (16.0-19.0)	
FEMALE	43.8	43.5 (41.9-45.2)		15.8	15.9 (14.6-17.1)	
AGE GROUP						
18–24	34.9	(30.4-39.3)*		6.7	(4.5 - 9.0)*	
25–34	49.1	(46.2-52.0)*		13.6	(11.6-15.5)*	
35–44	57.8	(55.3-60.4)*		16.3	(14.3-18.4)*	
45–54	60.7	(57.9-63.6)*		22.4	(19.8-25.0)*	
55–64	65.9	(62.4-69.4)*		25.5	(22.2-28.8)*	
65–74	60.8	(56.8-64.7)*		19.0	(15.8-22.2)*	
75 AND OLDER	50.1	(45.6-54.5)*		11.0	(8.2-13.8)*	
RACE-ETHNICITY**						
WHITE	54.3	53.9 (52.5-55.3)		16.2	16.0 (15.0-17.0)	
BLACK	64.2	66.6 (60.6-72.5)		23.9	25.0 (19.6-30.5)	
HISPANIC	63.5	67.1 (62.6-71.5)		21.3	23.9 (19.2-28.5)	
ASIAN	23.3	35.0 (23.7-46.3)		4.4	5.8 (1.3-10.2)	
EDUCATION						
< HIGH SCHOOL	64.5	66.8 (62.6-71.0)		23.1	24.6 (20.6-28.6)	
HIGH SCHOOL	58.0	59.2 (56.8-61.7)		18.7	19.7 (17.7-21.7)	
COLLEGE 1–3 YRS	55.0	55.8 (53.2-58.3)		18.2	18.9 (16.8-20.9)	
COLLEGE 4+ YRS	49.7	48.9 (46.7-51.0)		12.9	12.7 (11.2-14.2)	
HOUSEHOLD INCOME						
<\$25,000	56.1	57.7 (54.6-60.7)		21.0	24.1 (21.5-26.8)	
\$25–34,999	56.1	57.1 (53.4-60.8)		17.8	18.5 (15.4-21.6)	
\$35–49,999	53.1	53.7 (50.3-57.2)		16.6	16.8 (14.2-19.3)	
\$50–74,999	58.4	58.8 (55.5-62.1)		19.7	20.0 (17.1-22.9)	
\$75,000+	54.3	52.3 (49.2-55.4)		14.2	12.8 (11-14.7)	
REGION						
I–WESTERN	55.5	55.5 (52.2-58.9)		18.0	18.0 (15.5-20.5)	
II–CENTRAL	57.3	57.7 (54.4-61.0)		18.1	18.2 (15.7-20.8)	
III–NORTH EAST	56.5	56.0 (53.1-58.9)		18.2	18.1 (15.8-20.5)	
IV–METRO WEST	50.5	49.5 (46.6-52.3)		13.4	12.9 (11.0-14.9)	
V–SOUTH EAST	57.0	56.8 (53.8-59.7)		16.6	16.5 (14.3-18.6)	
VI–BOSTON	49.8	54.3 (50.9-57.7)		17.0	20.2 (17.1-23.2)	

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

Section 3.6: Physical Activity

All respondents were asked if they participated in any leisure time physical activity in the previous month. Respondents were also asked if they participated in moderate and vigorous physical activities. Adults who participated in 30 minutes of moderate exercise 5 days per week or 20 minutes of vigorous activity 3 days per week were classified as engaging in regular physical activity.

ANY EXERCISE IN PAST MONTH (Table 3.6)

- 77% of Massachusetts adults reported any exercise in the past month
- Men were more likely to have exercised in the past month than women
- Hispanics were less likely to have exercised in the past month than all other race-ethnicity groups
- The percentage of adults who exercised at least once in the past month increased with increasing education and income levels
- Since 1986, the percentage of adults who exercised at least once in the past month has increased (Figure 3.6)

REGULAR PHYSICAL ACTIVITY PAST MONTH (Table 3.6)

- 51% of Massachusetts adults reported regular physical activity in the past month
- The percentage of adults who reported regular physical activity decreased with increasing age
- White adults were more likely to report regular physical activity in the past month than all other race-ethnicity groups
- The percentage of adults who reported regular physical activity in the past month increased with increasing income and education

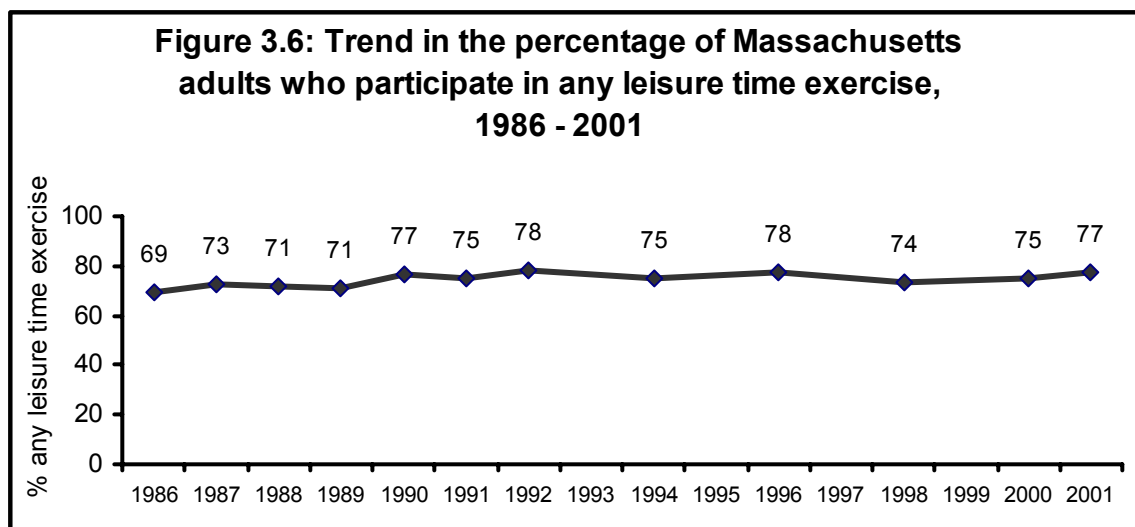


TABLE 3.6 - PHYSICAL ACTIVITY AMONG MASSACHUSETTS ADULTS, 2001

	ANY EXERCISE IN PAST MONTH			REGULAR PHYSICAL ACTIVITY**		
	CRUDE %	AGE-ADJUSTED % 95% CI		CRUDE %	AGE-ADJUSTED % 95% CI	
OVERALL	77.2	77.3 (76.2-78.3)		51.4	51.4 (50.1-52.7)	
GENDER						
MALE	80.4	80.3 (78.7-81.8)		53.2	52.9 (50.9-54.9)	
FEMALE	74.2	74.8 (73.3-76.2)		49.8	50.2 (48.4-51.9)	
AGE GROUP						
18-24	82.7	(79.5-86.0)*		62.4	(58.0-66.9)*	
25-34	80.5	(78.3-82.7)*		55.4	(52.5-58.3)*	
35-44	77.9	(75.7-80.1)*		52.9	(50.2-55.6)*	
45-54	78.9	(76.5-81.3)*		50.8	(47.8-53.8)*	
55-64	75.6	(72.5-78.6)*		47.1	(43.3-50.9)*	
65-74	74.1	(70.6-77.5)*		46.2	(42.0-50.4)*	
75 AND OLDER	60.3	(56.0-64.5)*		32.2	(27.6-36.8)*	
RACE-ETHNICITY***						
WHITE	79.4	80.1 (79.0-81.1)		53.0	53.7 (52.2-55.1)	
BLACK	69.3	69.7 (64.3-75.1)		40.4	37.5 (31.7-43.4)	
HISPANIC	57.5	57.4 (52.7-62.1)		42.4	39.2 (34.4-43.9)	
ASIAN	77.0	78.8 (72.4-85.2)		41.6	32.6 (25.5-39.6)	
EDUCATION						
< HIGH SCHOOL	54.2	53.2 (48.6-57.7)		37.8	39.8 (35.0-44.6)	
HIGH SCHOOL	67.1	67.4 (65.1-69.7)		47.7	48.5 (45.9-51.1)	
COLLEGE 1-3 YRS	78.8	78.3 (76.3-80.3)		52.5	51.6 (48.9-54.2)	
COLLEGE 4+ YRS	87.6	87.3 (85.8-88.7)		55.8	56.0 (53.8-58.2)	
HOUSEHOLD INCOME						
<\$25,000	63.2	61.5 (58.6-64.4)		41.6	42.8 (39.6-45.9)	
\$25-34,999	70.6	69.7 (66.2-73.2)		49.0	48.8 (44.8-52.7)	
\$35-49,999	77.0	76.8 (73.8-79.7)		50.5	50.4 (46.9-53.9)	
\$50-74,999	82.9	82.8 (80.3-85.3)		58.6	58.7 (55.3-62.1)	
\$75,000+	88.4	89.3 (87.6-91.0)		57.0	59.5 (56.5-62.5)	
REGION						
I-WESTERN	75.3	75.3 (72.6-78.0)		54.1	54.6 (51.2-58.0)	
II-CENTRAL	76.6	76.2 (73.4-78.9)		48.7	48.4 (45.0-51.7)	
III-NORTH EAST	74.6	74.6 (72.0-77.1)		48.1	48.1 (44.9-51.2)	
IV-METRO WEST	81.6	81.9 (79.7-84.1)		54.2	54.6 (51.7-57.6)	
V-SOUTH EAST	75.9	76.3 (73.7-78.8)		50.0	50.3 (47.2-53.4)	
VI-BOSTON	77.4	75.2 (72.1-78.2)		53.2	48.9 (45.4-52.3)	

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** In 2001, physical activity questions were changed by CDC. As such, rates are not comparable to prior years.

*** White, Black and Asian race categories refer to non-Hispanic.

Section 3.7: Flu Shot and Pneumonia Vaccine

All respondents were asked whether they had received a flu shot in the past 12 months. In addition, all respondents were asked if they had ever received a pneumonia vaccine.

FLU SHOT (Table 3.7)

- 36% of Massachusetts adults ages 50-64 received a flu vaccine in the past year
- 71% of adults ages 65 and older received a flu shot in the past year
- The percentage of adults who had a flu shot in the past year was consistent across education and income levels
- Since 1993, the percentage of adults ages 65 and older who had a flu shot in the past year increased (Figure 3.7)

PNEUMONIA VACCINE (Table 3.7)

- 64% of Massachusetts adults ages 65 and older have ever received a pneumonia vaccination
- Adults with less than a high school education were less likely to have ever had a pneumonia vaccination than adults of higher education levels

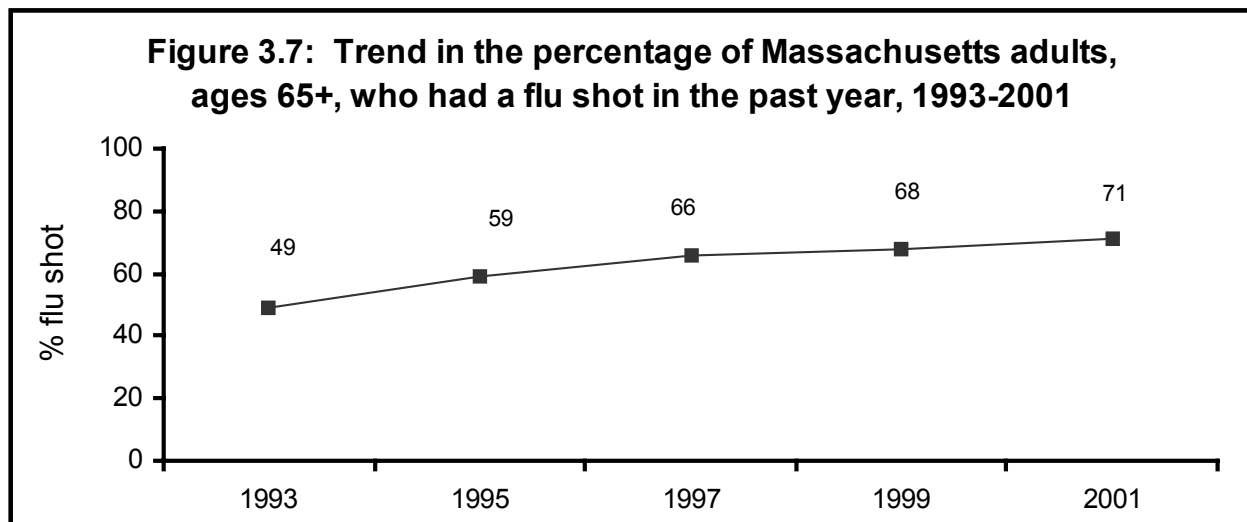


TABLE 3.7 - FLU SHOT AND PNEUMONIA VACCINATION AMONG MASSACHUSETTS ADULTS, 2001

	FLU SHOT IN PAST YEAR				EVER HAD PNEUMONIA VACCINATION, AGES 65+	
	AGES 50-64		AGES 65+			
	CRUDE		CRUDE		CRUDE	
	CRUDE %	95% CI	CRUDE %	95% CI	CRUDE %	95% CI
OVERALL	36.1	(33.5-38.7)	70.6	(67.9-73.3)	63.5	(60.7-66.4)
GENDER						
MALE	35.1	(31.2-39.1)	73.7	(69.4-78.1)	59.0	(54.1-64.0)
FEMALE	37.0	(33.6-40.5)	68.6	(65.2-72.1)	66.4	(62.9-69.9)
AGE GROUP						
50-64	36.1	(33.5-38.7)				
65-74			67.7	(63.9-71.4)	60.4	(56.5-64.4)
75 AND OLDER			74.8	(71.1-78.5)	67.9	(63.8-72.1)
RACE-ETHNICITY*						
WHITE	36.0	(33.2-38.8)	71.4	(68.6-74.2)	64.7	(61.7-67.7)
BLACK	37.8	(22.4-53.1)	†	--	†	--
HISPANIC	34.7	(23.6-45.7)	62.9	(47.3-78.5)	†	--
ASIAN	†	--	†	--	†	--
EDUCATION						
< HIGH SCHOOL	36.1	(27.2-44.9)	66.6	(59.7-73.6)	57.0	(49.5-64.5)
HIGH SCHOOL	31.1	(26.1-36.0)	68.1	(63.5-72.8)	65.1	(60.3-69.9)
COLLEGE 1-3 YRS	36.0	(30.8-41.2)	68.7	(62.9-74.5)	65.4	(59.4-71.4)
COLLEGE 4+ YRS	39.3	(35.0-43.5)	78.4	(73.5-83.2)	63.7	(58.0-69.4)
HOUSEHOLD INCOME						
<\$25,000	33.1	(26.9-39.2)	70.4	(66.0-74.8)	64.0	(59.2-68.7)
\$25-34,999	37.1	(28.8-45.3)	68.7	(61.4-75.9)	62.8	(55.0-70.6)
\$35-49,999	35.7	(28.5-42.9)	71.4	(63.4-79.5)	70.6	(62.5-78.6)
\$50-74,999	35.5	(29.2-41.8)	71.4	(60.7-82.0)	60.2	(49.2-71.2)
\$75,000+	38.2	(33.4-43.1)	71.0	(60.9-81.1)	57.2	(45.7-68.6)
REGION						
I-WESTERN	31.6	(25.5-37.7)	73.9	(67.7-80.1)	66.2	(59.4-73.1)
II-CENTRAL	34.9	(28.0-41.8)	67.2	(59.4-75.1)	63.2	(55.2-71.3)
III-NORTH EAST	36.6	(30.3-42.8)	72.3	(66.0-78.7)	65.7	(58.8-72.6)
IV-METRO WEST	43.5	(37.6-49.4)	72.3	(66.2-78.5)	66.7	(60.4-73.1)
V-SOUTH EAST	28.9	(23.6-34.2)	67.7	(62.1-73.3)	59.4	(53.5-65.4)
VI-BOSTON	42.6	(34.1-51.2)	68.5	(60.1-76.9)	55.4	(46.4-64.5)

* White, Black and Asian race categories refer to non-Hispanic.

† Insufficient numbers.

Section 3.8: Hypertension Awareness

All respondents were asked if they had ever been told by a doctor that they had high blood pressure. Individuals with high blood pressure were asked if they were currently taking medicine for their high blood pressure.

HIGH BLOOD PRESSURE (Table 3.8)

- 24% of all adults had high blood pressure
- The percentage of adults reporting high blood pressure increased with increasing age
- Black adults were more likely to report high blood pressure than other race-ethnicity groups
- Since 1990, there has been no significant change in the percentage of adults who were told they have high blood pressure (Figure 3.8)

MEDICINE FOR HIGH BLOOD PRESSURE (Table 3.8)

- 72% of those with high blood pressure take medication for that condition
- Women were more likely than men to take medication for their high blood pressure
- The percentage of adults who took medicine for their high blood pressure increased with increasing age

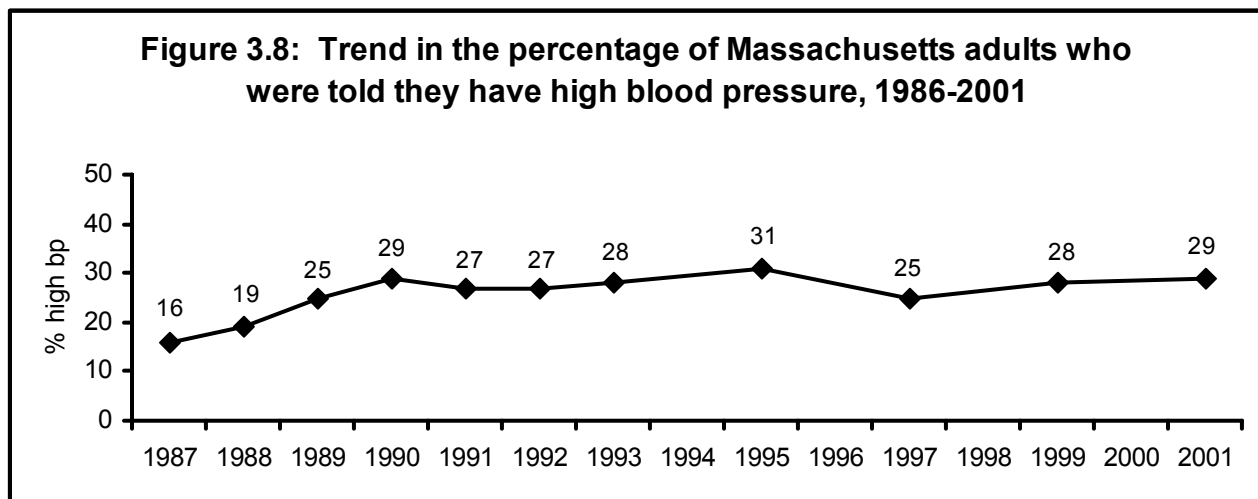


TABLE 3.8 – HYPERTENSION AWARENESS AMONG MASSACHUSETTS ADULTS , 2001					
	HIGH BLOOD PRESSURE			TAKE MEDICINE FOR HIGH BLOOD PRESSURE***	
	CRUDE %	AGE-ADJUSTED %	95% CI	CRUDE %	95% CI
OVERALL	23.6	23.1	(22.1-24.1)	72.1	(69.8-74.4)
GENDER					
MALE	23.5	24.2	(22.6-25.7)	65.8	(62.1-69.6)
FEMALE	23.6	21.9	(20.7-23.1)	77.8	(75.0-80.5)
AGE GROUP					
18–24	4.8		(3.0 - 6.5)*	†	--
25–34	8.7		(7.1-10.3)*	18.5	(11.6-25.4)*
35–44	14.3		(12.4-16.2)*	47.3	(40.1-54.6)*
45–54	24.1		(21.6-26.6)*	67.7	(62.0-73.4)*
55–64	39.0		(35.5-42.6)*	82.3	(77.7-86.8)*
65–74	50.3		(46.3-54.3)*	89.3	(85.8-92.7)*
75 AND OLDER	52.7		(48.3-57.0)*	90.1	(86.8-93.4)*
RACE-ETHNICITY**					
WHITE	24.4	22.7	(21.7-23.8)	73.4	(70.9-75.9)
BLACK	29.8	35.0	(29.6-40.4)	71.2	(61.8-80.5)
HISPANIC	18.0	24.1	(20.0-28.2)	58.8	(49.1-68.5)
ASIAN	5.6	16.2	(6.4-25.9)	†	--
EDUCATION					
< HIGH SCHOOL	30.4	28.2	(24.5-31.8)	76.2	(70.3-82.0)
HIGH SCHOOL	28.3	26.5	(24.5-28.5)	75.2	(71.1-79.2)
COLLEGE 1–3 YRS	23.4	23.6	(21.6-25.6)	73.4	(69.0-77.8)
COLLEGE 4+ YRS	19.0	20.0	(18.3-21.6)	67.0	(62.6-71.4)
HOUSEHOLD INCOME					
<\$25,000	33.1	29.4	(27.0-31.9)	76.6	(72.5-80.6)
\$25–34,999	28.7	27.0	(23.8-30.3)	72.9	(65.9-79.8)
\$35–49,999	21.9	22.7	(20.0-25.3)	69.6	(63.1-76.1)
\$50–74,999	19.1	21.2	(18.5-23.9)	74.2	(67.8-80.7)
\$75,000+	17.2	18.7	(16.3-21.0)	62.5	(56.6-68.3)
REGION					
I–WESTERN	25.2	23.6	(21.1-26.1)	71.9	(66.2-77.6)
II–CENTRAL	22.7	23.1	(20.6-25.7)	72.0	(65.4-78.6)
III–NORTH EAST	23.6	22.9	(20.6-25.2)	72.6	(67.3-77.8)
IV–METRO WEST	21.9	20.6	(18.6-22.6)	72.5	(67.4-77.6)
V–SOUTH EAST	27.1	25.5	(23.1-27.9)	73.2	(68.3-78.1)
VI–BOSTON	19.7	25.1	(22.2-27.9)	68.1	(60.8-75.3)

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

*** Among respondents who reported being told by a doctor that they had high blood pressure.

† Insufficient numbers.

Section 3.9: Cholesterol Awareness

All respondents were asked when they last had their cholesterol checked by a health professional. Those who had their cholesterol checked were also asked if they had ever been told by a doctor that their cholesterol was high.

CHOLESTEROL CHECKED WITHIN PAST 5 YEARS (Table 3.9)

- 81% of all adults have had their cholesterol checked within the past 5 years
- The percentage of adults who had their cholesterol checked within the past 5 years increased until age 74 and then decreased
- Cholesterol screening increased with increasing levels of education and income

HIGH CHOLESTEROL (Table 3.9)

- 30% of adults who had their cholesterol checked were told that their cholesterol was high
- Men were more likely than women to report high cholesterol
- The percentage of adults reporting high cholesterol increased with increasing age until age 74
- Since 1987, the percentage of adults with high cholesterol has remained the same (Figure 3.8)

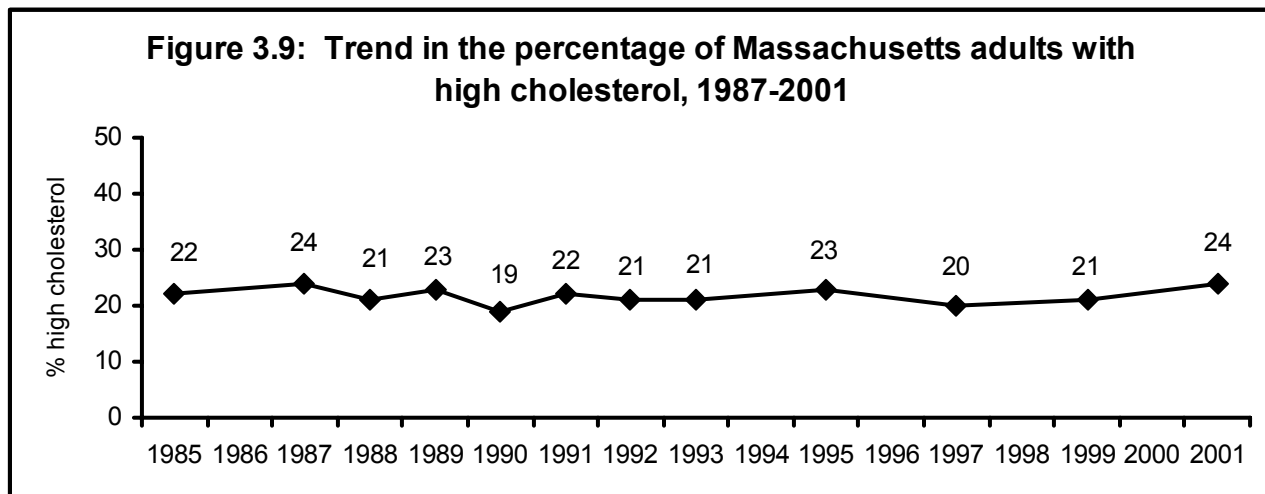


TABLE 3.9 – CHOLESTEROL AWARENESS AMONG MASSACHUSETTS ADULTS , 2001

	CHOLESTEROL CHECKED IN LAST 5 YEARS			HIGH CHOLESTEROL ***		
	CRUDE %	AGE-ADJUSTED % 95% CI		CRUDE %	AGE-ADJUSTED % 95% CI	
OVERALL	81.4	80.8 (79.8-81.8)		29.7	27.8 (26.6-28.9)	
GENDER						
MALE	80.0	80.1 (78.6-81.6)		31.5	30.2 (28.3-32.1)	
FEMALE	82.8	81.7 (80.3-83.0)		28.2	25.4 (23.9-26.9)	
AGE GROUP						
18–24	53.9	(49.1-58.7)*		10.1	(6.3-13.9)*	
25–34	71.4	(68.9-74.0)*		15.7	(13.3-18.0)*	
35–44	81.5	(79.5-83.5)*		23.0	(20.6-25.4)*	
45–54	88.7	(86.7-90.6)*		32.7	(29.8-35.5)*	
55–64	92.5	(90.5-94.5)*		42.2	(38.5-45.9)*	
65–74	95.0	(93.4-96.6)*		46.7	(42.6-50.8)*	
75 AND OLDER	92.2	(90.1-94.3)*		41.5	(36.8-46.1)*	
RACE-ETHNICITY**						
WHITE	83.1	81.6 (80.4-82.7)		30.7	28.0 (26.7-29.3)	
BLACK	75.4	78.9 (74.5-83.3)		26.9	27.0 (20.7-33.4)	
HISPANIC	71.0	76.5 (72.9-80.2)		22.8	27.3 (22.7-32.0)	
ASIAN	65.2	72.4 (65.6-79.3)		18.1	33.2 (26.8-39.6)	
EDUCATION						
< HIGH SCHOOL	74.6	72.9 (68.7-77.0)		34.5	29.4 (24.8-34.0)	
HIGH SCHOOL	78.4	77.0 (74.8-79.1)		33.5	30.4 (28.0-32.9)	
COLLEGE 1–3 YRS	80.7	80.9 (78.9-82.8)		30.5	28.6 (26.2-31.0)	
COLLEGE 4+ YRS	85.2	84.1 (82.5-85.7)		26.2	25.7 (23.7-27.6)	
HOUSEHOLD INCOME						
<\$25,000	76.1	73.8 (71.1-76.5)		33.9	29.7 (26.8-32.6)	
\$25–34,999	76.2	75.6 (72.1-79.1)		33.1	30.1 (26.3-33.9)	
\$35–49,999	79.5	79.4 (76.8-82.1)		29.4	28.3 (25.1-31.5)	
\$50–74,999	83.2	83.5 (81.0-86.0)		28.7	29.2 (25.8-32.6)	
\$75,000+	87.6	86.6 (84.5-88.6)		27.9	27.2 (24.5-30.0)	
REGION						
I–WESTERN	78.0	76.1 (73.2-79.0)		29.2	25.2 (22.3-28.1)	
II–CENTRAL	80.1	79.7 (77.1-82.4)		30.2	28.2 (25.1-31.2)	
III–NORTH EAST	82.7	81.3 (78.8-83.7)		30.1	27.9 (25.1-30.6)	
IV–METRO WEST	84.2	82.6 (80.4-84.9)		30.4	28.1 (25.4-30.7)	
V–SOUTH EAST	83.3	82.0 (79.7-84.3)		32.5	30.3 (27.2-33.3)	
VI–BOSTON	76.2	80.7 (78.1-83.3)		22.5	24.5 (21.3-27.6)	

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

*** Analysis conducted among respondents who reported having their cholesterol checked.

SECTION 4: CHRONIC HEALTH CONDITIONS

Section 4.1: Cardiovascular Health

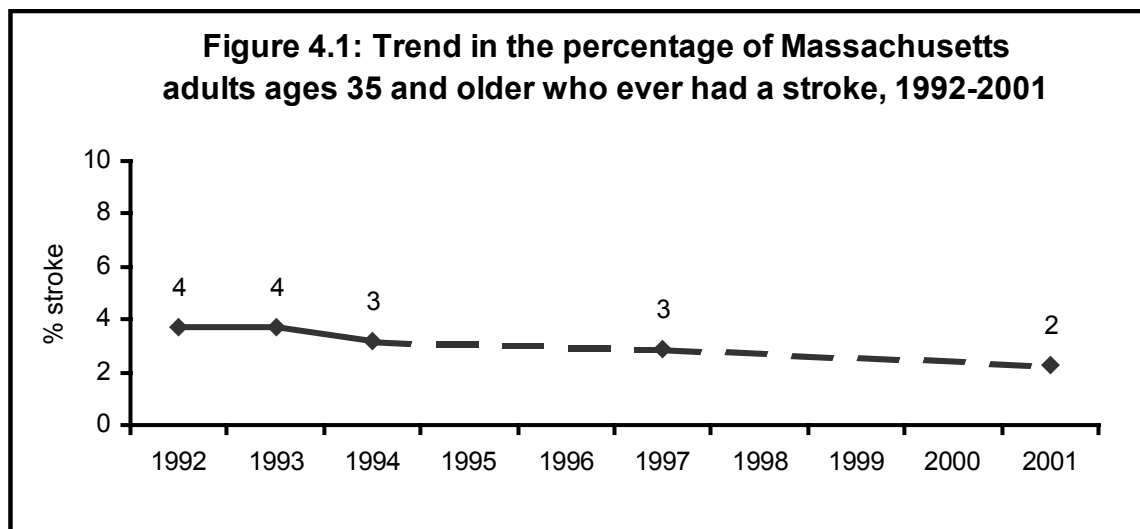
All respondents ages 35 and older were asked (1) if they had been told by a doctor that they had a heart attack, or (2) if they had been told they had angina or coronary heart disease. Respondents were classified as having heart disease if they had one of these conditions. All respondents ages 35 and older were also asked if they had been told by a doctor that they had a stroke.

HEART DISEASE (Table 4.1)

- 8% of adults ages 35 and older had been told by a doctor that they had heart disease
- Men were more likely to report heart disease than women
- The percentage of adults reporting heart disease increased with increasing age
- Adults with less than a high school education were more likely to report heart disease than adults with higher levels of education
- Adults with the lowest household income were more likely to report heart disease than those with higher household incomes

STROKE (Table 4.1)

- 2% of adults ages 35 and older have had a stroke
- The percentage of adults who have had a stroke increased with increasing age
- White adults were less likely to have had a stroke compared to Black and Hispanic adults
- The percentage of adults who have had a stroke decreased with increasing education
- Since 1992, the percentage of adults ages 35 and older who reported ever having a stroke has decreased (Figure 4.1)



Note: dotted line signifies years in which the question was not asked.

TABLE 4.1 – CARDIOVASCULAR DISEASE AMONG MASSACHUSETTS ADULTS, AGES 35 AND OLDER, 2001

	HEART DISEASE			STROKE		
	CRUDE %	AGE-ADJUSTED %	95% CI	CRUDE %	AGE-ADJUSTED %	95% CI
OVERALL	8.4	8.2	(7.4 - 9.0)	2.4	2.3	(1.9 - 2.8)
GENDER						
MALE	10.4	10.9	(9.4-12.4)	2.4	2.6	(1.8 - 3.3)
FEMALE	6.7	6.1	(5.2 - 6.9)	2.3	2.1	(1.6 - 2.6)
AGE GROUP						
35-44	1.5		(0.7 - 2.3)*	0.3		(0.0 - 0.5)*
45-54	4.2		(2.9 - 5.4)*	1.6		(0.8 - 2.5)*
55-64	9.0		(7.0-11.0)*	2.9		(1.6 - 4.1)*
65-74	17.7		(14.6-20.9)*	4.0		(2.6 - 5.5)*
75 AND OLDER	23.7		(19.7-27.6)*	6.8		(4.6 - 9.1)*
RACE-ETHNICITY**						
WHITE	8.5	8.0	(7.2 - 8.9)	2.1	2.0	(1.5 - 2.4)
BLACK	6.4	7.3	(3.5-11.1)	4.9	5.9	(2.5 - 9.4)
HISPANIC	6.7	8.8	(4.5-13.2)	4.5	6.1	(2.1-10.1)
ASIAN	†	†	--	†	†	--
EDUCATION						
< HIGH SCHOOL	16.2	12.4	(9.2-15.6)	5.4	4.5	(2.5 - 6.6)
HIGH SCHOOL	10.3	8.9	(7.3-10.4)	2.8	2.4	(1.7 - 3.2)
COLLEGE 1-3 YRS	8.3	8.1	(6.4 - 9.8)	2.3	2.3	(1.3 - 3.3)
COLLEGE 4+ YRS	5.6	7.0	(5.6 - 8.4)	1.6	2.0	(1.2 - 2.8)
HOUSEHOLD INCOME						
<\$25,000	15.8	11.8	(9.3-14.2)	5.8	5.8	(3.7 - 7.8)
\$25-34,999	9.6	7.6	(5.3 - 9.8)	2.9	2.2	(1.0 - 3.3)
\$35-49,999	7.6	8.2	(5.8-10.5)	1.3	1.4	(0.4 - 2.5)
\$50-74,999	6.2	7.6	(5.1-10.1)	1.1	1.3	(0.4 - 2.2)
\$75,000+	4.6	6.9	(4.4 - 9.3)	0.9	2.4	(0.2 - 4.7)
REGION						
I-WESTERN	8.8	8.2	(6.1-10.3)	2.4	2.2	(1.0 - 3.5)
II-CENTRAL	8.8	9.9	(7.6-12.1)	2.4	2.6	(1.4 - 3.9)
III-NORTH EAST	8.7	8.8	(6.8-10.7)	2.2	2.3	(1.3 - 3.3)
IV-METRO WEST	7.9	7.8	(6.0 - 9.5)	1.9	1.9	(1.0 - 2.7)
V-SOUTH EAST	8.7	7.8	(6.1 - 9.4)	3.0	2.8	(1.7 - 3.8)
VI-BOSTON	6.9	7.5	(4.9-10.1)	2.6	3.0	(1.3 - 4.7)

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

† Insufficient numbers.

Section 4.2: Diabetes

All respondents were asked if they had been told by a doctor that they had diabetes. For the purposes of analysis, women who had diabetes only during pregnancy (gestational diabetes) were considered not to have diabetes.

DIABETES (Table 4.2)

- 6% of Massachusetts adults reported that they had been told by a doctor that they had diabetes
- The percentage of adults with diabetes increased with increasing age
- Black adults were more likely to have diabetes than any other race-ethnicity group
- The percentage of adults with diabetes decreased with increasing education and income
- Since 1988, the percentage of adults with diabetes has increased slightly (Figure 4.2)

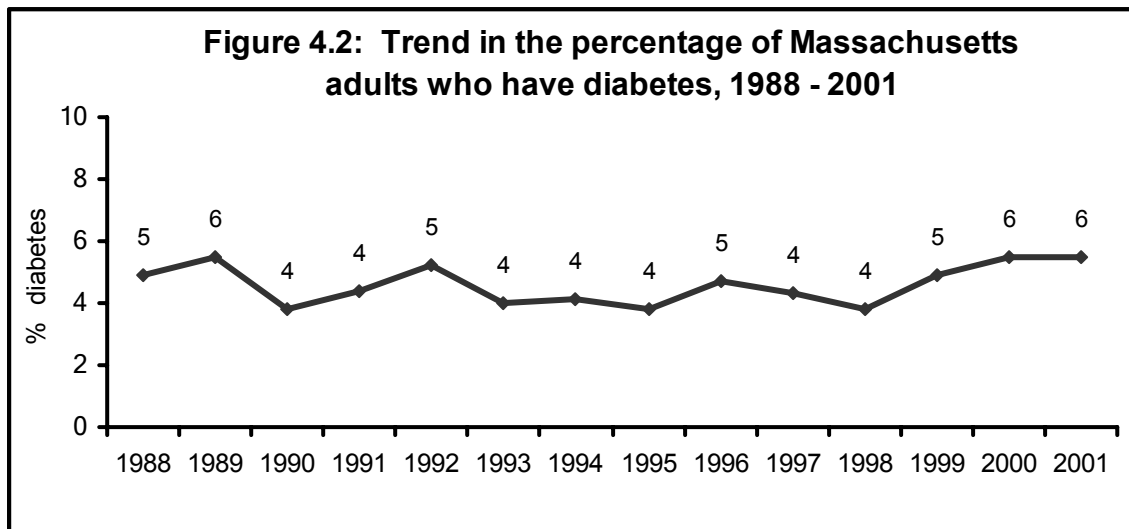


TABLE 4.2 - DIABETES AMONG MASSACHUSETTS ADULTS, 2001

	DIABETES		
	CRUDE %	AGE-ADJUSTED %	95% CI
OVERALL	5.6	5.5	(4.9 - 6.0)
GENDER			
MALE	6.0	6.3	(5.3 - 7.3)
FEMALE	5.2	4.8	(4.1 - 5.5)
AGE GROUP			
18-24	0.5		(0.0 - 1.2)*
25-34	1.2		(0.5 - 1.9)*
35-44	2.3		(1.4 - 3.2)*
45-54	4.8		(3.5 - 6.1)*
55-64	10.4		(8.2 -12.7)*
65-74	17.1		(14.0-20.2)*
75 AND OLDER	11.9		(9.0-14.8)*
RACE-ETHNICITY**			
WHITE	5.5	5.0	(4.4 - 5.6)
BLACK	8.2	10.3	(6.3-14.2)
HISPANIC	5.1	8.4	(5.1-11.7)
ASIAN	5.7	11.8	(1.5-22.1)
EDUCATION			
< HIGH SCHOOL	10.3	8.8	(6.6-10.9)
HIGH SCHOOL	7.3	6.5	(5.4 - 7.7)
COLLEGE 1-3 YRS	5.0	5.1	(3.9 - 6.2)
COLLEGE 4+ YRS	3.8	4.1	(3.2 - 5.0)
HOUSEHOLD INCOME			
<\$25,000	8.9	8.3	(6.6-10.1)
\$25-34,999	7.2	6.5	(4.7 - 8.3)
\$35-49,999	5.2	5.5	(3.9 - 7.0)
\$50-74,999	4.1	4.8	(3.3 - 6.4)
\$75,000+	3.3	3.9	(2.4 - 5.3)
REGION			
I-WESTERN	5.8	5.2	(3.8 - 6.6)
II-CENTRAL	4.8	5.0	(3.6 - 6.5)
III-NORTH EAST	6.2	6.0	(4.6 - 7.4)
IV-METRO WEST	5.3	5.0	(3.7 - 6.3)
V-SOUTH EAST	6.0	5.3	(4.2 - 6.5)
VI-BOSTON	5.4	7.4	(5.4 - 9.4)

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

Section 4.3: Asthma

All respondents were asked if a doctor had ever told them that they had asthma and if they still have asthma.

EVER HAD ASTHMA (Table 4.3)

- 13% of Massachusetts adults reported ever having been told they had asthma
- Women were more likely to have ever had asthma than men
- The percentage of adults who ever had asthma decreased with increasing age
- Asians were less likely to report ever having asthma than any other race-ethnicity groups
- The percentage of adults who ever had asthma decreased with increasing education

CURRENTLY HAVE ASTHMA (Table 4.3)

- 10% of Massachusetts adults reported currently having asthma
- Women were more likely to currently have asthma than men
- The percentage of adults who currently have asthma decreased with increasing age
- Asians were less likely to report currently having asthma than any other race-ethnicity groups
- Adults with less than a high school education were more likely to currently have asthma compared to adults with higher levels of education

TABLE 4.3 – ASTHMA AMONG MASSACHUSETTS ADULTS, 2001

	EVER HAD ASTHMA			CURRENTLY HAVE ASTHMA		
	CRUDE %	AGE-ADJUSTED % 95% CI		CRUDE %	AGE-ADJUSTED % 95% CI	
OVERALL	13.1	13.1 (12.2-14.0)		9.5	9.5 (8.7-10.3)	
GENDER						
MALE	11.0	10.9 (9.6-12.2)		7.4	7.3 (6.2 - 8.4)	
FEMALE	14.9	15.2 (14.0-16.5)		11.4	11.6 (10.5-12.8)	
AGE GROUP						
18–24	17.5	(14.0-21.0)*		13.7	(10.4-16.9)*	
25–34	15.3	(13.3-17.3)*		9.8	(8.2-11.5)*	
35–44	13.7	(11.8-15.6)*		9.9	(8.2-11.6)*	
45–54	11.5	(9.6-13.5)*		8.7	(6.9-10.5)*	
55–64	11.7	(9.4-13.9)*		9.0	(7.0-11.1)*	
65–74	10.0	(7.4-12.5)*		7.2	(5.1 - 9.3)*	
75 AND OLDER	9.1	(6.5-11.6)*		6.1	(4.1 - 8.2)*	
RACE-ETHNICITY**						
WHITE	13.2	13.7 (12.6-14.7)		9.8	10.1 (9.1-11.0)	
BLACK	12.0	12.4 (8.8-16.0)		8.7	9.2 (6.0-12.4)	
HISPANIC	13.4	13.7 (10.3-17.1)		8.9	9.6 (6.5-12.7)	
ASIAN	4.0	2.9 (0.6 - 5.2)		2.8	2.1 (0.1 - 4.1)	
EDUCATION						
< HIGH SCHOOL	17.8	18.7 (15.1-22.3)		14.5	15.2 (11.8-18.5)	
HIGH SCHOOL	12.5	13.1 (11.3-15.0)		9.1	9.5 (7.9-11.1)	
COLLEGE 1–3 YRS	13.1	12.7 (11.0-14.4)		9.7	9.3 (7.8-10.8)	
COLLEGE 4+ YRS	12.5	12.4 (10.9-13.8)		8.7	8.7 (7.4-10.0)	
HOUSEHOLD INCOME						
<\$25,000	16.4	17.5 (15.2-19.9)		12.3	13.1 (11.0-15.2)	
\$25–34,999	14.4	15.0 (12.0-18.0)		10.3	10.9 (8.2-13.6)	
\$35–49,999	12.1	12.2 (9.8-14.5)		9.0	9.0 (6.9-11.0)	
\$50–74,999	11.1	11.2 (9.0-13.3)		8.1	8.1 (6.2-10.1)	
\$75,000+	12.4	12.1 (10.1-14.1)		8.6	8.4 (6.7-10.1)	
REGION						
I–WESTERN	12.5	13.0 (10.7-15.3)		8.3	8.7 (6.8-10.6)	
II–CENTRAL	15.0	15.0 (12.6-17.4)		11.9	11.9 (9.6-14.2)	
III–NORTH EAST	12.0	12.4 (10.3-14.4)		9.4	9.7 (7.9-11.6)	
IV–METRO WEST	11.7	11.7 (9.8-13.6)		8.2	8.1 (6.4 - 9.8)	
V–SOUTH EAST	13.9	14.3 (12.0-16.6)		9.9	10.2 (8.1-12.2)	
VI–BOSTON	14.6	13.5 (11.2-15.8)		10.2	9.3 (7.4-11.1)	

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

Section 4.4: Arthritis

All respondents ages 45 and older were asked if they had experienced pain, stiffness or swelling in or around a joint in the past year, whether these symptoms were present on most days for at least one month, and if they had ever been told by a physician that they had arthritis. Arthritis was defined as having joint pain, stiffness or swelling on most days for at least one month or having a physician diagnosis of arthritis.

ARTHRITIS (Table 4.4)

- 45% of Massachusetts adults ages 45 and older had arthritis
- Women were more likely than men to have arthritis
- The percentage of adults ages 45 and older with arthritis increased with increasing age
- Adults who were college graduates were less likely to report arthritis than adults with less education
- The percentage of adults ages 45 and older with arthritis decreased with increasing income

TABLE 4.4 - ARTHRITIS AMONG MASSACHUSETTS ADULTS, AGE 45 AND OLDER, 2001			
	ARTHRITIS		
	CRUDE %	AGE-ADJUSTED %	95% CI
OVERALL	45.3	45.0	(43.2-46.8)
GENDER			
MALE	36.8	37.4	(34.6-40.1)
FEMALE	52.3	51.3	(49.1-53.6)
AGE GROUP			
45-54	34.6		(31.9-37.4)*
55-64	47.4		(43.8-51.0)*
65-74	53.1		(49.1-57.0)*
75 AND OLDER	55.8		(51.5-60.2)*
RACE-ETHNICITY**			
WHITE	45.5	45.0	(43.1-46.9)
BLACK	51.8	49.7	(40.0-59.3)
HISPANIC	39.5	42.6	(34.4-50.8)
ASIAN	†	†	--
EDUCATION			
< HIGH SCHOOL	56.1	53.7	(47.8-59.6)
HIGH SCHOOL	49.5	48.3	(44.8-51.7)
COLLEGE 1-3 YRS	51.5	51.7	(48.1-55.3)
COLLEGE 4+ YRS	35.4	37.1	(34.2-40.0)
HOUSEHOLD INCOME			
<\$25,000	56.6	55.1	(50.9-59.2)
\$25-34,999	48.5	47.7	(42.0-53.4)
\$35-49,999	43.9	43.3	(38.3-48.3)
\$50-74,999	40.8	41.4	(36.1-46.8)
\$75,000+	33.8	37.6	(32.0-43.1)
REGION			
I-WESTERN	45.6	44.8	(40.5-49.1)
II-CENTRAL	45.9	46.5	(41.6-51.4)
III-NORTH EAST	45.8	46.1	(41.9-50.2)
IV-METRO WEST	44.9	44.5	(40.7-48.2)
V-SOUTH EAST	45.8	44.9	(41.1-48.6)
VI-BOSTON	41.8	42.1	(36.8-47.4)

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

† Insufficient numbers.

Section 4.5: Disability

All respondents were asked about disabilities and activity limitations. Respondents were classified as having a disability if, for at least one year, (1) they had an impairment that limited activities or caused cognitive difficulties, (2) they used special equipment or required help from others to get around, or (3) they reported a disability of any kind. Those who reported a disability were then asked if, as a result of their disability, they required assistance with personal care or routine needs.

HAD DISABILITY (Table 4.5)

- 20% of Massachusetts adults had a disability or limitation
- The percentage of adults with a disability increased with increasing age
- Asian adults were less likely to have a disability than adults of all other race-ethnicity groups
- The percentage of adults with a disability decreased with increasing education and income
- Since 1998, the percentage of adults who reported a disability increased (Figure 4.5)

DISABILITY/ NEED HELP WITH ACTIVITIES (Table 4.5)

- 5% of Massachusetts adults had a disability or limitation and required help with daily activities
- Women were more likely to have a disability and need help with daily activities than men
- The percentage of adults with a disability and in need of help with daily activities increased with increasing age
- Adults with lower levels of education and income were more likely to have a disability or limitation requiring help with daily activities

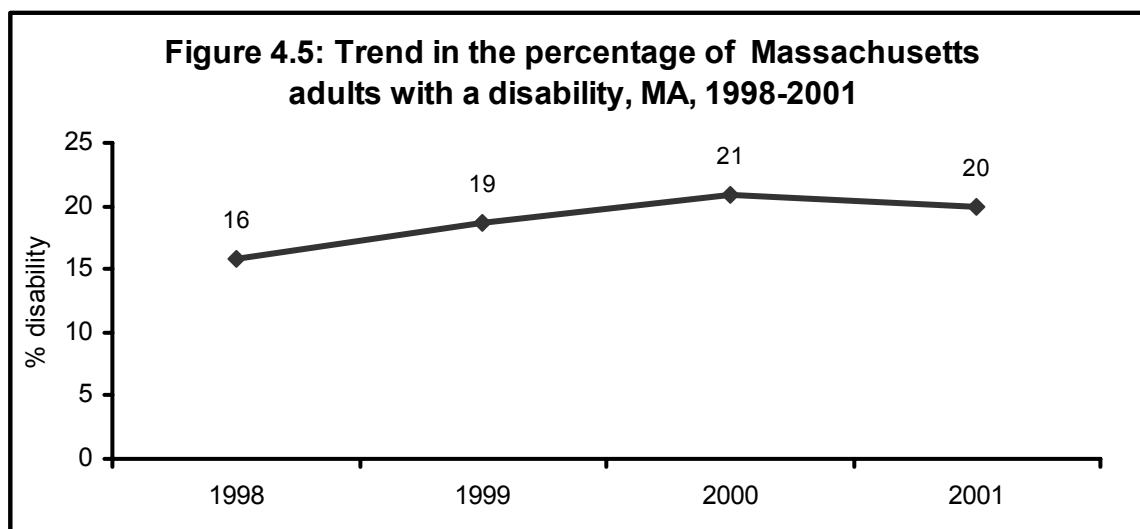


TABLE 4.5 - DISABILITY AMONG MASSACHUSETTS ADULTS, 2001

	HAVE DISABILITY			DISABILITY/ NEED HELP WITH ACTIVITIES		
	CRUDE %	AGE-ADJUSTED %	95% CI	CRUDE %	AGE-ADJUSTED %	95% CI
OVERALL	20.0	20.2	(18.9-21.5)	4.9	5.0	(4.3 - 5.6)
GENDER						
MALE	18.6	19.2	(17.3-21.2)	3.1	3.3	(2.5 - 4.2)
FEMALE	21.3	21.0	(19.3-22.7)	6.5	6.4	(5.4 - 7.4)
AGE GROUP						
18-24	11.0		(7.5-14.5)*	0.9		(0.0 - 1.7)*
25-34	11.7		(9.4-14.0)*	1.8		(1.0 - 2.7)*
35-44	16.8		(14.3-19.3)*	4.6		(3.3 - 6.0)*
45-54	22.4		(19.3-25.5)*	6.1		(4.4 - 7.7)*
55-64	27.5		(23.4-31.5)*	5.7		(3.6 - 7.8)*
65-74	28.2		(23.6-32.8)*	7.7		(5.1-10.3)*
75 AND OLDER	40.7		(35.0-46.4)*	13.9		(10.0-17.8)*
RACE-ETHNICITY**						
WHITE	20.8	20.4	(19.0-21.8)	4.7	4.5	(3.9 - 5.2)
BLACK	15.8	19.2	(13.2-25.2)	5.7	7.4	(3.2-11.6)
HISPANIC	17.1	20.6	(15.4-25.8)	8.6	11.8	(7.4-16.2)
ASIAN	5.8	6.4	(1.5-11.3)	0.2	0.2	(0.0 - 1.5)
EDUCATION						
< HIGH SCHOOL	32.3	32.9	(27.4-38.5)	12.5	13.9	(9.7-18.1)
HIGH SCHOOL	24.1	23.9	(21.3-26.6)	6.7	6.5	(5.1 - 8.0)
COLLEGE 1-3 YRS	21.1	21.6	(19.1-24.2)	5.0	5.3	(4.0 - 6.6)
COLLEGE 4+ YRS	14.5	15.4	(13.5-17.3)	2.3	2.5	(1.7 - 3.3)
HOUSEHOLD INCOME						
<\$25,000	31.1	34.0	(30.4-37.7)	9.8	11.6	(9.3-14.0)
\$25-34,999	24.0	24.2	(19.8-28.7)	6.0	6.0	(3.6 - 8.5)
\$35-49,999	20.1	20.8	(17.3-24.2)	4.9	5.1	(3.2 - 7.1)
\$50-74,999	14.9	15.0	(12.0-18.0)	2.2	2.1	(1.1 - 3.2)
\$75,000+	13.5	14.7	(11.9-17.4)	1.8	1.9	(0.9 - 3.0)
REGION						
I-WESTERN	22.9	22.8	(19.4-26.2)	4.5	4.5	(3.1 - 5.9)
II-CENTRAL	21.3	22.4	(18.9-25.9)	4.7	5.4	(3.5 - 7.2)
III-NORTH EAST	20.2	20.3	(17.3-23.2)	6.9	6.8	(5.0 - 8.6)
IV-METRO WEST	20.1	19.4	(16.6-22.1)	3.2	3.0	(1.9 - 4.2)
V-SOUTH EAST	20.5	19.7	(16.7-22.7)	6.7	6.2	(4.5 - 7.9)
VI-BOSTON	13.5	17.8	(14.4-21.2)	3.1	4.6	(2.7 - 6.5)

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

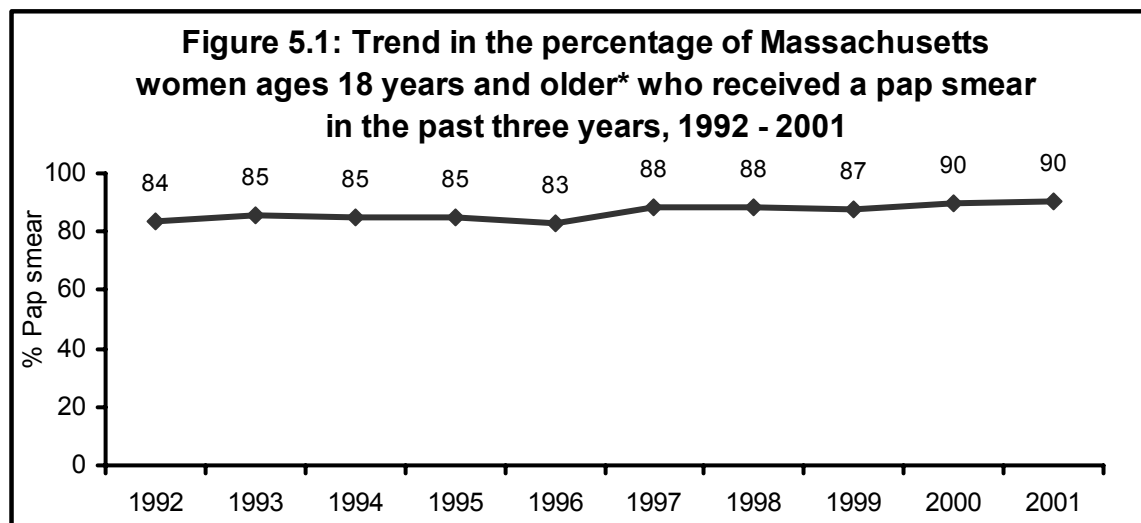
SECTION 5: CANCER SCREENING

Section 5.1: Cervical Cancer Screening

All women were asked whether or not they had ever had a Pap smear to test for cervical cancer. Those who reported having the test were asked how long it had been since their last test. This analysis examined the percentage of women who had a Pap smear within the past three years. Women who had a hysterectomy were excluded from the analysis.

PAP SMEAR TEST IN PAST 3 YEARS (Table 5.1)

- 90% of Massachusetts women reported having a Pap smear in the past three years
- Women ages 75 and older were less likely to have had a Pap smear in the past 3 years than younger women
- The percentage of women who had a Pap smear in the past three years increased with increasing education
- Since 1992, the percentage of women who had a Pap Smear in the past three years has increased (Figure 5.1)



* Among women without hysterectomy.

TABLE 5.1 – CERVICAL CANCER SCREENING AMONG MASSACHUSETTS WOMEN, 2001			
	PAP SMEAR TEST WITHIN PAST 3 YRS*		
	CRUDE %	AGE-ADJUSTED %	95% CI
OVERALL	90.1	89.8	(88.0-91.6)
GENDER			
MALE			
FEMALE	90.1	89.8	(88.0-91.6)
AGE GROUP			
18–24	84.8		(77.2-92.4)**
25–34	95.5		(93.3-97.8)**
35–44	93.1		(89.5-96.7)**
45–54	93.6		(90.6-96.5)**
55–64	93.6		(89.6-97.7)**
65–74	84.9		(78.5-91.3)**
75 AND OLDER	62.7		(52.0-73.4)**
RACE-ETHNICITY***			
WHITE	90.7	90.5	(88.5-92.4)
BLACK	87.0	87.4	(78.8-96.0)
HISPANIC	88.0	84.4	(77.1-91.8)
ASIAN	†	†	--
EDUCATION			
< HIGH SCHOOL	81.5	85.5	(78.8-92.2)
HIGH SCHOOL	84.2	85.0	(80.5-89.4)
COLLEGE 1–3 YRS	89.2	89.8	(86.8-92.7)
COLLEGE 4+ YRS	96.0	94.9	(92.4-97.4)
HOUSEHOLD INCOME			
<\$25,000	84.9	87.5	(83.5-91.4)
\$25–34,999	86.2	84.9	(79.3-90.6)
\$35–49,999	88.9	88.5	(82.3-94.8)
\$50–74,999	92.6	91.8	(87.1-96.5)
\$75,000+	97.3	95.3	(91.7-99.0)
REGION			
I–WESTERN	89.9	89.8	(85.5-94.1)
II–CENTRAL	90.3	90.2	(86.2-94.1)
III–NORTH EAST	92.4	91.6	(87.4-95.8)
IV–METRO WEST	90.7	89.9	(85.5-94.3)
V–SOUTH EAST	86.2	86.7	(81.5-91.9)
VI–BOSTON	90.9	90.2	(85.6-94.8)

* Among women without hysterectomy

** Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

*** White, Black and Asian race categories refer to non-Hispanic.

† Insufficient numbers.

Section 5.2: Colorectal Cancer Screening

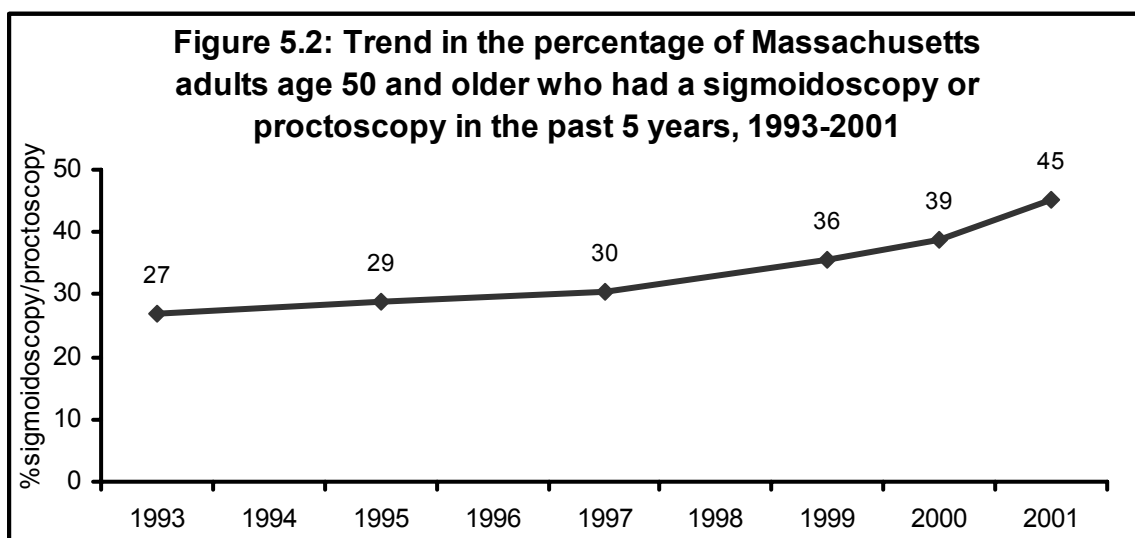
All adults ages 50 and older were asked about colorectal cancer screening, including blood stool test and sigmoidoscopy or colonoscopy. In this analysis, we examined the percentage of adults who reported having a blood stool test within the past two years and the percentage who reported having had a sigmoidoscopy or colonoscopy within the past five years.

BLOOD STOOL TEST IN THE PAST TWO YEARS (Table 5.2)

- 39% of Massachusetts adults ages 50 and older reported having a blood stool test in the past two years
- The percentage of adults ages 50 and older who had a blood stool test in the past two years increased with increasing age until age 79, then decreased
- The percentage of adults ages 50 and older who had a blood stool test in the past two years increased with increasing education

SIGMOIDOSCOPY OR COLONOSCOPY IN THE PAST FIVE YEARS (Table 5.2)

- 45% of Massachusetts adults ages 50 and older reported having a sigmoidoscopy or colonoscopy in the past five years
- Men were more likely to have had a a sigmoidoscopy or colonoscopy in the past five years than women
- The percentage of adults ages 50 and older who had a sigmoidoscopy or colonoscopy in the past five years increased with increasing age until age 79
- The percentage of adults ages 50 and older who had a sigmoidoscopy or colonoscopy in the past five years increased with increasing education and income
- Since 1993, the percentage of adults ages 50 and older who had a sigmoidoscopy or colonoscopy in the past five years has increased (Figure 5.2)



**TABLE 5.2 - COLORECTAL CANCER SCREENING AMONG MASSACHUSETTS ADULTS
AGES 50 AND OLDER, 2001**

	BLOOD STOOL TEST IN THE PAST 2 YEARS			SIGMOIDOSCOPY OR COLONOSCOPY IN PAST 5 YEARS		
	CRUDE %	AGE-ADJUSTED %	95% CI	CRUDE %	AGE-ADJUSTED %	95% CI
OVERALL	38.8	38.3	(36.3-40.3)	45.1	44.6	(42.6-46.6)
GENDER						
MALE	39.6	39.9	(36.7-43.1)	47.8	47.8	(44.5-51.1)
FEMALE	38.1	37.4	(34.9-39.9)	42.9	42.1	(39.5-44.7)
AGE GROUP						
50-59	32.0		(29.0-35.0)*	40.2		(37.0-43.3)*
60-69	44.3		(40.3-48.2)*	47.3		(43.3-51.2)*
70-79	46.4		(42.1-50.7)*	53.3		(49.0-57.6)*
80 AND OLDER	32.0		(26.1-38.0)*	38.2		(31.8-44.5)*
RACE-ETHNICITY**						
WHITE	39.2	38.6	(36.5-40.7)	45.8	45.3	(43.1-47.4)
BLACK	43.6	45.6	(34.6-56.6)	44.3	43.9	(32.4-55.3)
HISPANIC	28.9	30.9	(20.5-41.2)	33.5	33.6	(24.1-43.2)
ASIAN	†	†	--	†	†	--
EDUCATION						
< HIGH SCHOOL	31.4	28.7	(23-34.3)	38.9	36.5	(30.3-42.7)
HIGH SCHOOL	37.7	36.7	(33-40.3)	40.6	39.7	(36.1-43.4)
COLLEGE 1-3 YRS	40.4	39.9	(36-43.9)	44.1	43.9	(39.8-48.1)
COLLEGE 4+ YRS	40.5	41.6	(38.1-45.2)	51.0	51.7	(48.2-55.3)
HOUSEHOLD INCOME						
<\$25,000	36.9	34.6	(30.5-38.6)	40.0	36.0	(32.1-39.9)
\$25-34,999	38.8	38.5	(32.6-44.4)	44.6	44.1	(38.1-50.0)
\$35-49,999	45.4	44.7	(38.8-50.7)	48.3	49.6	(43.9-55.3)
\$50-74,999	38.6	41.0	(34.2-47.9)	47.6	49.0	(42.1-55.9)
\$75,000+	38.4	39.7	(33.3-46.1)	48.2	48.8	(43.2-54.3)
REGION						
I-WESTERN	43.2	42.7	(37.9-47.5)	43.4	43.3	(38.3-48.2)
II-CENTRAL	37.3	37.5	(32.2-42.9)	50.2	50.4	(44.9-55.9)
III-NORTH EAST	42.0	41.5	(36.7-46.4)	40.9	40.7	(35.9-45.5)
IV-METRO WEST	37.5	36.9	(32.6-41.1)	48.9	48.5	(44.1-52.9)
V-SOUTH EAST	37.7	36.8	(32.6-40.9)	43.0	41.9	(37.6-46.3)
VI-BOSTON	31.3	31.6	(25.8-37.5)	43.6	43.5	(37.2-49.8)

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

† Insufficient numbers.

Section 5.3: Prostate Cancer Screening

All men ages 50 and older were asked about prostate screening, including prostate specific antigen (PSA) test and digital rectal exam (DRE). This analysis examined the percentage of men ages 50 and older who had a PSA in the past year and the percentage of men ages 50 and older who had a DRE in the past year, in accordance with American Cancer Society recommendations for prostate cancer screening.

PSA IN THE PAST YEAR (Table 5.3)

- 64% of Massachusetts men ages 50 and older reported having a PSA test in the past year
- The percentage of men age 50 and older who had a PSA test in the past year increased with increasing age until age 79
- Recent PSA testing was highest among men who attended four or more years of college

DRE IN THE PAST YEAR (Table 5.3)

- 69% of Massachusetts men ages 50 and older reported having a digital rectal exam in the past year
- Men in the 60-69 age group were the most likely to have had a DRE in the past year
- The percentage of men ages 50 and older who had a DRE in the past year increased with increasing education and income

**TABLE 5.3 - PROSTATE CANCER SCREENING AMONG MASSACHUSETTS MEN
AGES 50 AND OLDER, 2001**

	PSA IN PAST YEAR			DRE IN PAST YEAR		
	CRUDE %	AGE-ADJUSTED %	95% CI	CRUDE %	AGE-ADJUSTED %	95% CI
OVERALL	63.8	64.1	(60.9-67.3)	69.2	69.7	(66.7-72.6)
GENDER						
MALE	63.8	64.1	(60.9-67.3)	69.2	69.7	(66.7-72.6)
FEMALE						
AGE GROUP						
50-59	54.2		(49.3-59.0)*	61.2		(56.5-65.9)*
60-69	71.1		(65.2-76.9)*	76.7		(71.5-82.0)*
70-79	76.6		(70.6-82.6)*	75.7		(69.5-81.9)*
80 AND OLDER	60.0		(47.4-72.7)*	71.7		(61.2-82.3)*
RACE-ETHNICITY**						
WHITE	65.2	65.1	(61.7-68.4)	70.8	70.8	(67.8-73.9)
BLACK	†	†	--	†	†	--
HISPANIC	†	†	--	†	†	--
ASIAN	†	†	--	†	†	--
EDUCATION						
< HIGH SCHOOL	61.8	58.6	(48.4-68.8)	58.4	56.1	(46.2-66.1)
HIGH SCHOOL	62.1	61.5	(55.4-67.7)	65.5	64.9	(59.1-70.8)
COLLEGE 1-3 YRS	59.8	58.9	(51.5-66.3)	66.7	66.6	(59.6-73.6)
COLLEGE 4+ YRS	67.1	68.7	(64.0-73.3)	74.6	75.8	(71.6-80.1)
HOUSEHOLD INCOME						
<\$25,000	62.0	57.5	(50.1-64.9)	65.7	62.3	(55.1-69.6)
\$25-34,999	66.8	65.2	(56.3-74.1)	64.3	62.9	(54.0-71.9)
\$35-49,999	63.5	61.1	(52.1-70.1)	71.5	69.5	(62.2-76.8)
\$50-74,999	63.8	67.8	(60.4-75.3)	70.9	73.0	(65.7-80.3)
\$75,000+	66.9	66.4	(58.4-74.4)	73.6	72.2	(65.3-79.2)
REGION						
I-WESTERN	61.6	61.4	(53.2-69.6)	64.6	65.2	(57.8-72.7)
II-CENTRAL	63.7	66.0	(57.5-74.4)	65.4	65.9	(57.6-74.2)
III-NORTH EAST	62.2	61.7	(53.9-69.5)	69.8	70.0	(62.5-77.5)
IV-METRO WEST	62.9	62.9	(56.2-69.6)	73.3	72.9	(66.9-78.8)
V-SOUTH EAST	68.8	69.2	(63.2-75.1)	69.9	70.4	(64.5-76.3)
VI-BOSTON	59.9	62.0	(52.0-72.0)	68.3	72.7	(64.9-80.6)

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

† Insufficient numbers.

SECTION 6: OTHER TOPICS

Section 6.1: HIV Testing

Respondents ages 18-64 were asked whether or not they had ever been tested for human immunodeficiency virus (HIV), the virus that causes AIDS. Those who reported having been tested were asked if they had been tested for HIV within the past year.

EVER TESTED FOR HIV (Table 6.1)

- 46% of Massachusetts adults reported ever having been tested for HIV
- Adults ages 25-44 were more likely to have ever been tested for HIV than adults in younger or older age categories
- Black and Hispanic adults were more likely to have ever been tested for HIV than adults in other race-ethnicity groups
- Since 1993, the percentage of adults who reported ever having an HIV test has increased (Figure 6.1)

TESTED FOR HIV IN PAST YEAR (Table 6.1)

- 13% of Massachusetts adults reported being tested for HIV in the past year
- The percentage of adults who were tested for HIV in the past year decreased with increasing age
- Black and Hispanic adults were more likely to have been tested for HIV in the past year than White or Asian adults

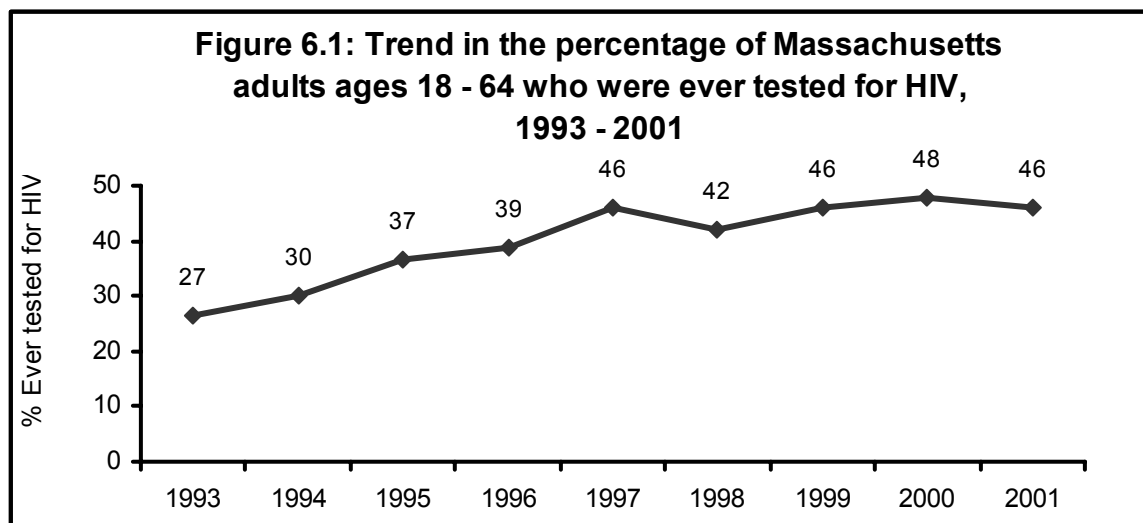


TABLE 6.1 – HIV TESTING AMONG MASSACHUSETTS ADULTS, AGE 18-64, 2001						
	EVER TESTED FOR HIV			TESTED FOR HIV IN THE PAST YEAR		
	CRUDE %	AGE-ADJUSTED % 95% CI		CRUDE %	AGE-ADJUSTED % 95% CI	
OVERALL	46.1	46.4	(44.9-47.8)	13.4	13.5	(12.4-14.5)
GENDER						
MALE	45.2	45.3	(43.2-47.4)	13.8	13.7	(12.1-15.3)
FEMALE	46.9	47.5	(45.6-49.3)	13.1	13.4	(12.0-14.7)
AGE GROUP						
18–24	41.0		(36.4-45.6)*	19.3		(15.6-23.0)*
25–34	65.4		(62.6-68.2)*	20.7		(18.2-23.2)*
35–44	54.5		(51.9-57.2)*	12.3		(10.5-14.1)*
45–54	36.2		(33.3-39.0)*	8.7		(6.8-10.5)*
55–64	23.1		(19.9-26.3)*	5.4		(3.4 - 7.3)*
RACE-ETHNICITY**						
WHITE	44.1	44.9	(43.4-46.5)	11.7	12.0	(10.9-13.2)
BLACK	68.4	68.9	(62.5-75.2)	32.9	33.6	(26.3-40.9)
HISPANIC	59.7	55.5	(50.4-60.5)	22.4	20.6	(16.0-25.3)
ASIAN	30.7	30.9	(23.6-38.2)	7.9	8.0	(3.5-12.6)
EDUCATION						
< HIGH SCHOOL	44.6	46.9	(41.4-52.4)	16.4	18.0	(13.4-22.7)
HIGH SCHOOL	42.7	43.0	(40.3-45.8)	13.1	12.8	(10.8-14.9)
COLLEGE 1–3 YRS	45.1	47.5	(44.7-50.2)	13.6	13.7	(11.6-15.9)
COLLEGE 4+ YRS	48.8	47.7	(45.4-50.0)	13.0	13.0	(11.3-14.6)
HOUSEHOLD INCOME						
<\$25,000	49.1	50.8	(47.2-54.5)	17.5	18.0	(14.9-21.0)
\$25–34,999	49.0	47.7	(43.4-51.9)	16.9	15.4	(12.2-18.6)
\$35–49,999	41.2	40.4	(36.9-43.9)	10.7	10.5	(8.3-12.7)
\$50–74,999	47.0	46.3	(42.8-49.7)	12.0	12.1	(9.7-14.6)
\$75,000+	47.4	46.3	(43.4-49.2)	12.0	12.8	(10.6-15.1)
REGION						
I–WESTERN	44.8	47.0	(43.3-50.8)	14.8	15.3	(12.4-18.3)
II–CENTRAL	44.2	44.4	(41.0-47.9)	12.1	12.4	(9.9-14.9)
III–NORTH EAST	47.1	47.1	(43.7-50.5)	12.8	13.0	(10.4-15.6)
IV–METRO WEST	45.7	45.9	(42.8-49.1)	11.5	12.0	(9.7-14.3)
V–SOUTH EAST	44.6	45.6	(42.2-49.0)	13.3	13.7	(11.1-16.2)
VI–BOSTON	51.1	51.1	(47.4-54.8)	17.9	17.2	(14.1-20.3)

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

Section 6.2: Intimate Partner Abuse

All women ages 18-59 were asked questions about physical and emotional abuse in the past 12 months by intimate partners, defined as current or former husbands, partners, boyfriends, girlfriends or dates. Intimate partner abuse was defined as being frightened for safety due to anger threats of an intimate partner, physically hurt by an intimate partner or made to take part in unwanted sexual activity by an intimate partner. Intimate partner violence is defined as being physically hurt by an intimate partner.

INTIMATE PARTNER VIOLENCE (Table 6.2)

- 2% of women ages 18-59 experienced violence from an intimate partner in the past 12 months
- Intimate partner violence decreased with increasing age
- Hispanic women were more likely to report intimate partner violence than women in any other race-ethnicity group
- Intimate partner violence decreased with increasing education and income

INTIMATE PARTNER ABUSE (Table 6.2)

- 4% of women ages 18-59 experienced intimate partner abuse in the past 12 months
- The percentage of women ages 18-59 reporting intimate partner abuse in the past 12 months decreased with increasing age, with women ages 18-24 reporting the highest percentage of intimate partner abuse (13%)
- The percentage of women ages 18-59 reporting intimate partner abuse in the past 12 months decreased with increasing education and income

TABLE 6.2 – INTIMATE PARTNER ABUSE/VIOLENCE AMONG MASSACHUSETTS WOMEN, AGE 18-59, 2001

	INTIMATE PARTNER VIOLENCE IN PAST YEAR			INTIMATE PARTNER ABUSE IN PAST YEAR		
	CRUDE %	AGE-ADJUSTED % 95% CI		CRUDE %	AGE-ADJUSTED % 95% CI	
OVERALL	2.3	2.3	(1.4 - 3.1)	4.4	4.4	(3.3 - 5.5)
GENDER						
MALE						
FEMALE	2.3	2.3	(1.4 - 3.1)	4.4	4.4	(3.3 - 5.5)
AGE GROUP						
18–24	7.5		(2.9-12.0)*	12.8		(7.1-18.5)*
25–34	1.9		(0.7 - 3.0)*	3.8		(2.3 - 5.4)*
35–44	1.4		(0.4 - 2.4)*	2.7		(1.4 - 3.9)*
45–54	0.7		(0.2 - 1.3)*	2.6		(1.4 - 3.8)*
55–59	†	†	--	†	†	--
RACE-ETHNICITY**						
WHITE	1.9	2.0	(1.2 - 2.8)	4.0	4.2	(2.9 - 5.4)
BLACK	1.5	1.8	(0.4 - 7.0)	6.2	7.0	(1.5-12.5)
HISPANIC	6.1	4.7	(1.0 - 8.4)	8.8	7.1	(3.1 -11.1)
ASIAN	†	†	--	†	†	--
EDUCATION						
< HIGH SCHOOL	9.0	7.3	(1.7-12.9)	11.9	9.8	(3.9-15.6)
HIGH SCHOOL	3.2	3.2	(1.2 - 5.2)	5.4	5.5	(3.1 - 7.9)
COLLEGE 1–3 YRS	1.7	1.6	(0.5 - 2.7)	4.5	4.2	(2.3 - 6.0)
COLLEGE 4+ YRS	1.2	1.5	(0.3 - 2.6)	2.8	3.4	(1.5 - 5.2)
HOUSEHOLD INCOME						
<\$25,000	5.6	4.6	(1.8 - 7.4)	9.4	8.5	(5.1-12.0)
\$25–34,999	3.2	2.1	(0.2 - 3.9)	6.6	4.5	(2.0 - 7.0)
\$35–49,999	2.0	1.8	(0.2 - 3.5)	3.3	3.1	(1.1 - 5.0)
\$50–74,999	0.6	0.6	(0.2 - 2.1)	1.2	1.2	(0.2 - 2.2)
\$75,000+	0.6	0.5	(0.2 - 1.3)	1.3	1.1	(0.4 - 1.8)
REGION						
I–WESTERN	3.6	3.6	(0.9 - 6.2)	6.2	6.2	(3.0 - 9.4)
II–CENTRAL	2.8	2.7	(0.5 - 4.8)	3.8	3.7	(1.4 - 5.9)
III–NORTH EAST	4.1	3.9	(1.0 - 6.8)	6.5	6.3	(2.9 - 9.6)
IV–METRO WEST	1.1	1.3	(0.4 - 3.6)	1.9	2.0	(0.5 - 3.5)
V–SOUTH EAST	1.1	1.1	(0.2 - 2.1)	4.6	5.1	(2.4 - 7.7)
VI–BOSTON	1.1	0.8	(0.3 - 2.1)	4.6	4.0	(1.5 - 6.5)

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

† Insufficient numbers.

Section 6.3: Firearms

All respondents were asked if any firearms were now kept in or around their homes.

FIREARMS (TABLE 6.3)

- 13% of Massachusetts adults reported keeping firearms in or around their homes
- Men were more likely to keep firearms in or around their homes than women
- White adults were more likely to report firearms in or around their homes than Black or Hispanic adults
- Adults with less than a high school education were less likely to keep firearms in or around their homes than adults of higher education levels
- Adults residing in the Boston region were less likely to keep firearms in or around their homes than adults residing in all other regions

TABLE 6.3 – FIREARMS AMONG MASSACHUSETTS ADULTS, 2001

	ANY FIREARMS NOW KEPT IN OR AROUND HOME		
	CRUDE %	AGE-ADJUSTED %	95% CI
OVERALL	12.6	12.6	(11.7-13.4)
GENDER			
MALE	15.9	16.0	(14.6-17.5)
FEMALE	9.6	9.7	(8.6-10.7)
AGE GROUP			
18–24	8.9		(6.2-11.5)*
25–34	9.4		(7.7-11.1)*
35–44	11.4		(9.6-13.2)*
45–54	16.3		(14.1-18.4)*
55–64	17.6		(14.7-20.6)*
65–74	14.4		(11.5-17.3)*
75 AND OLDER	10.4		(7.4-13.4)*
RACE-ETHNICITY**			
WHITE	13.9	13.8	(12.8-14.8)
BLACK	6.4	6.9	(3.7-10.2)
HISPANIC	4.7	5.3	(3.1 - 7.6)
ASIAN	4.1	9.5	(3.4 - 2 4)
EDUCATION			
< HIGH SCHOOL	8.9	7.5	(5.4 - 9.6)
HIGH SCHOOL	15.2	15.6	(13.7-17.5)
COLLEGE 1–3 YRS	12.9	13.0	(11.2-14.8)
COLLEGE 4+ YRS	11.4	11.6	(10.2-13.1)
HOUSEHOLD INCOME			
<\$25,000	7.6	7.1	(5.5 - 8.6)
\$25–34,999	10.9	10.3	(7.9-12.7)
\$35–49,999	12.6	12.6	(10.4-14.7)
\$50–74,999	15.9	15.9	(13.4-18.4)
\$75,000+	15.8	15.6	(13.2-18.1)
REGION			
I–WESTERN	16.6	16.5	(14.1-18.9)
II–CENTRAL	17.9	18.4	(15.7-21.0)
III–NORTH EAST	11.8	11.9	(9.8-13.9)
IV–METRO WEST	8.7	8.6	(6.9-10.3)
V–SOUTH EAST	16.1	16.0	(13.6-18.3)
VI–BOSTON	4.2	4.6	(3.1 - 6.0)

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

Section 6.4: Illicit Drug Use

All respondents were asked if they ever used (1) marijuana, (2) powder or crack cocaine, (3) heroin, (4) hallucinogens, or (5) sedatives or tranquilizers that were not prescribed. In addition, respondents ages 18-35 were asked if they ever used MDMA/Ecstasy. Respondents who ever used any of the aforementioned drugs were asked about the time since they had used each one. We examined the percentage of adults who ever used any of the aforementioned drugs and the percentage of adults who used any of these substances in the past 30 days.

EVER USED ILLICIT DRUGS (Table 6.4)

- 45% of Massachusetts adults ever used illicit drugs.
- Men were more likely than women to have ever used illicit drugs
- White adults were more likely to report ever using illicit drugs than all other race-ethnicity groups

ILLICIT DRUG USE IN THE PAST 30 DAYS (Table 6.4)

- 6% of Massachusetts adults reported use of illicit drugs in the past 30 days
- Men were more likely than women to report use of illicit drugs in the past 30 days
- Illicit drug use in the past 30 days decreased with increasing age
- Illicit drug use in the past 30 days was lower among adults who attended four or more years of college compared to adults of lower education levels.

TABLE 6.4 – ILLICIT DRUG USE AMONG MASSACHUSETTS ADULTS, 2001

	EVER USED ILLICIT DRUGS			USED ILLICIT DRUGS IN THE PAST 30 DAYS		
	CRUDE %	AGE-ADJUSTED % 95% CI		CRUDE %	AGE-ADJUSTED % 95% CI	
OVERALL	45.0	46.0	(44.4-47.7)	6.1	6.3	(5.3 - 7.2)
GENDER						
MALE	49.8	49.2	(46.7-51.7)	7.8	7.6	(6.1 - 9.1)
FEMALE	40.8	43.2	(41.1-45.3)	4.7	5.0	(3.9 - 6.1)
AGE GROUP						
18–24	61.5		(55.2-67.7)*	20.7		(15.3-26.1)*
25–34	58.0		(54.1-61.9)*	10.2		(7.8-12.6)*
35–44	62.0		(58.5-65.5)*	4.4		(3.0 - 5.9)*
45–54	52.7		(48.7-56.6)*	2.7		(1.6 - 3.9)*
55–64	28.3		(23.8-32.9)*	1.9		(0.4 - 3.4)*
65–74	7.3		(4.6-10.1)*	0.3		(0.0 - 0.7)*
75 AND OLDER	4.5		(1.8 - 7.2)*	0.1		(0.0 - 0.3)*
RACE-ETHNICITY**						
WHITE	48.1	50.9	(49.1-52.6)	6.4	7.1	(6.0 - 8.2)
BLACK	34.7	32.6	(25.2-40.0)	4.5	4.0	(1.5 - 6.5)
HISPANIC	21.8	19.1	(13.9-24.2)	1.7	1.5	(0.5 - 2.5)
ASIAN	25.5	17.2	(10.6-23.8)	8.0	5.4	(0.8 - 9.9)
EDUCATION						
< HIGH SCHOOL	30.0	33.6	(27.5-39.7)	7.1	7.9	(4.3-11.6)
HIGH SCHOOL	42.5	46.4	(43.1-49.7)	7.5	7.1	(5.3 - 8.9)
COLLEGE 1–3 YRS	47.4	48.7	(45.6-51.8)	7.7	7.5	(5.5 - 9.4)
COLLEGE 4+ YRS	48.3	47.3	(44.5-50.1)	4.2	4.1	(3.0 - 5.2)
HOUSEHOLD INCOME						
<\$25,000	32.7	38.1	(34.2-42.0)	5.5	6.3	(4.2 - 8.3)
\$25–34,999	42.5	46.1	(40.9-51.2)	6.1	6.4	(3.8 - 8.9)
\$35–49,999	48.7	48.0	(43.7-52.3)	10.3	9.9	(7.0-12.8)
\$50–74,999	52.3	49.8	(45.5-54.1)	4.2	4.4	(2.2 - 6.5)
\$75,000+	56.7	53.2	(49.4-57.1)	5.4	6.5	(4.2 - 8.8)
REGION						
I–WESTERN	46.5	50.8	(46.6-55.1)	5.9	6.0	(3.5 - 8.5)
II–CENTRAL	43.8	44.1	(39.8-48.5)	4.7	5.0	(2.9 - 7.0)
III–NORTH EAST	44.8	46.2	(42.4-50.1)	6.8	6.9	(4.5 - 9.3)
IV–METRO WEST	46.1	46.4	(42.7-50.1)	4.7	5.1	(3.3 - 7.0)
V–SOUTH EAST	43.6	46.3	(42.4-50.1)	8.6	9.3	(6.7-11.8)
VI–BOSTON	45.2	40.9	(36.5-45.3)	5.6	4.2	(2.6 - 5.8)

* Confidence interval presented is for the age-specific rate in the previous column. Please note, for a given age group, the crude rate is the same as the age-specific rate.

** White, Black and Asian race categories refer to non-Hispanic.

APPENDIX

SUMMARY OF 2001 BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM RESULTS

VARIABLES	MA %	US MEDIAN¶ %	US RANGE¶ %	MA RANK§	HP 2010† %
OVERALL HEALTH MEASURES					
FAIR–POOR HEALTH	12.1	14.0	9.4 – 34.5	10 TH	*
15+ POOR MENTAL HEALTH DAYS	9.6	9.3	4.0 – 15.1	30 TH	*
15+ DAYS DEPRESSED	7.1				*
15+ DAYS PAIN	6.8				*
HEALTH CARE ACCESS AND UTILIZATION					
NO HEALTH INSURANCE	7.2				0.0
HAVE PERSONAL DOCTOR	86.8	80.7	66.9 – 88.6	3 RD	85.0
DENTAL VISIT IN THE PAST YEAR	77.1				*
6+ TEETH MISSING FROM DISEASE	17.5				*
RISK FACTORS AND PREVENTIVE BEHAVIORS					
CURRENT SMOKER	19.5	22.9	12.5 – 30.9	4 TH	12.0
HEAVY SMOKER	2.2				*
QUIT ATTEMPT PAST YEAR	56.6	56.1	47.9 – 71.8	23 RD	75.0
PLAN TO QUIT SMOKING	41.1				*
LIVE IN HOUSE WHERE SMOKING IS NOT ALLOWED	68.9				*
SUPPORT BAN ON SMOKING IN RESTAURANTS	61.3				*
BINGE DRINKING	18.1	14.7	6.8 – 25.7	47 TH	6.0
HEAVY DRINKING	7.0	5.1	2.5 – 8.7	48 TH	*
OVERWEIGHT (BASED ON HP 2010)	54.4	59.0	51.4 – 63.8	5 TH	*
OBESE	16.6	21.0	14.9 – 26.5	2 ND	15.0
ANY EXERCISE IN PAST MONTH	77.2	74.5	50.8 – 83.5	16 TH	70.0
REGULAR PHYSICAL ACTIVITY	51.4	46.0	28.9 – 56.9	10 TH	*
FLU SHOT IN LAST YEAR (50-64)	36.1	37.0	17.7 – 46.6	30 TH	*
FLU SHOT IN LAST YEAR (65+)	70.6	66.7	36.8 – 79.0	12 TH	90.0
EVER HAD PNEUMONIA VACCINATION (65+)	63.5	61.8	24.1 – 70.9	20 TH	90.0

¶ The US median percentage and range are based on data for all fifty states, the District of Columbia, and Puerto Rico.

§ Based on lowest risk or healthiest behavior: 1st = best, 52nd = worst.

† HP 2010 = Healthy People 2010 Objectives.

* No applicable objective.

SUMMARY OF 2001 BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM RESULTS, CONTINUED

VARIABLES	MA %	US MEDIAN¶ %	US RANGE¶ %	MA RANK§	HP 2010† %
HIGH BLOOD PRESSURE	23.6	25.6	20.0 – 32.5	11 TH	16.0
TAKE MEDICINE FOR HIGH BLOOD PRESSURE	72.1				*
CHOLESTEROL CHECKED IN PAST 5 YEARS	81.4	72.5	65.4 – 81.4	1 ST	80.0
HIGH CHOLESTEROL	29.7	30.3	24.8 – 37.7	20 TH	*
CHRONIC HEALTH CONDITIONS					
HEART DISEASE (35+)	8.4				*
HAD STROKE (35+)	2.4				*
DIABETES	5.6	6.5	4.0 – 9.8	13 TH	2.5
EVER HAD ASTHMA	13.1	11.3	7.7 – 19.6	50 TH	*
CURRENT ASTHMA	9.5	7.3	5.3 – 9.5	51 ST	*
ARTHRITIS (45+)	45.3	48.7	27.3 – 59.4	11 TH	
HAVE DISABILITY OR LIMITATION	20.0				*
DISABILITY/LIMITED NEED HELP WITH ACTIVITIES	4.9				*
CANCER SCREENING					
PAP SMEAR IN PAST 3 YEARS	90.1				90.0
BLOOD STOOL TEST IN PAST 2 YEARS (50 +)	38.8	31.6	0.1 – 43.2	8 TH	50.0
SIGMOIDOSCOPY/COLONOSCOPY IN PAST 5 YEARS (50+)	45.1	37.4	25.6 – 53.6	9 TH	*
PSA BLOOD TEST IN PAST YEAR (MEN, 50 +)	63.8	56.8	49.2 – 66.2	6 TH	*
DRE IN THE PAST YEAR (MEN, 50+)	69.2	55.7	42.4 – 69.5	2 ND	*
OTHER TOPICS					
EVER TESTED FOR HIV (18-64)	46.1	45.6	31.5 – 65.3	25 TH	*
TESTED FOR HIV IN PAST YEAR (18-64)	13.4	12.9	7.3 – 29.7	22 ND	*
EXPERIENCED INTIMATE PARTNER VIOLENCE (WOMEN, 18-64)	2.3				*
EXPERIENCED INTIMATE PARTNER ABUSE (WOMEN, 18-64)	4.4				*
EVER USED ILLICIT DRUGS (18-64)	45.0				*
USED ILLICIT DRUGS IN PAST 30 DAYS (18-64)	6.1				2.0
FIREARMS IN OR AROUND HOME	12.6	39.4	3.8 – 59.7	5 TH	*

¶ The US median percentage and range are based on data for all fifty states, the District of Columbia, and Puerto Rico.

§ Based on lowest risk or healthiest behavior: 1st = best, 52nd = worst.

† HP 2010 = Healthy People 2010 Objectives.

* No applicable objective.

BRFSS METHODOLOGY

The Massachusetts BRFSS is a random-digit-dial (RDD) telephone survey of non-institutionalized Massachusetts adults residing in households with telephones, and in 2001 was conducted by ORC Macro, Inc. The sampling of the survey population involved a list-assisted, stratified RDD sampling frame, which assures that Massachusetts

The BRFSS is a random – digit-dial telephone survey of Massachusetts adults 18 and older.

households with telephone numbers assigned after publication of the current directories, as well as households with deliberately unlisted numbers, are included in the sample in appropriate proportions. This methodology is designed to more efficiently and validly reach all telephone equipped households, and to provide population estimates of health conditions and behaviors. Telephone numbers were randomly selected, and multiple attempts were made to reach each household. To be eligible to participate in the survey, a household had to be occupied by at least one adult aged 18 and older. Institutions, group quarters, and temporary residences lived-in for less than one month per year were ineligible. In order to provide estimates of health at the local level, additional interviews were conducted among adults residing in the following major cities in the Commonwealth: Boston, Fall River, Lawrence, Lowell, New Bedford, Springfield and Worcester.

Once a household was contacted, one adult was randomly selected to complete the interview. No proxy respondents or substitutions were allowed in the event that the selected adult was unwilling or unable to complete the interview for any reason such as language barriers,

In 2000, 8,628 adults participated in the BRFSS. All data are weighted, and provide population-based estimates of health among Massachusetts adults.

disability, or lack of availability. In addition to English, the survey was conducted in Spanish and Portuguese. In 2001, 8,628 adults completed the survey; among those determined to be eligible, interviews were completed with 39.7% of the potential respondents. Data were weighted to reflect the probability of selection and differential participation by sex and age. All analyses presented in this report were conducted using SUDAAN and SAS software and are considered

estimates for the adult population in Massachusetts. For each estimate in the core section we include a 95% confidence interval in order to assess the variability of the data. Since the survey represents a random sample of the population, and not a complete census, 95% confidence intervals provide a range of values that most likely contain the true percent estimates for the population.

There are some limitations that should be considered when interpreting results from the BRFSS. Households that do not have a telephone do not have the opportunity to participate in the survey. Although only 0.5% of Massachusetts households lack a telephone, almost 4% of households living below poverty lack a phone based on 2000 Census supplemental survey.

Although households were telephoned on repeated occasions, interviewers were not always able to reach the randomly selected adult in the household. In addition, some adults contacted did not agree to participate in the survey. Respondents who participated in the survey may have differed significantly from those not included in the survey. The weighting of the data partially takes into account this non-response.

All data collected by the BRFSS are based on self-report from the respondents. By its nature, self-reported data may be subject to error for several reasons. An individual may have difficulty remembering events that occurred a long time ago or the frequency of certain behaviors. Some respondents may over-report socially desirable behaviors, while underreporting behaviors they

perceive to be less acceptable. Finally, because the BRFSS surveys a randomly selected sample of Massachusetts adults, these results may differ to some extent from another random sample simply due to chance. Despite the limitations described above, the BRFSS is the only survey of health risks and behaviors that represents the general Massachusetts population.

TECHNICAL NOTES

Age-adjustment: Age-adjustment is a form of standardization. It is one tool used to remove the influence of an extraneous variable (a confounder) on the association between an exposure and outcome. For example, we may be interested in assessing whether adults with diabetes are

Age-adjusted rates are used to compare an outcome, such as tooth decay, between two groups of people of different ages, such as adults with and without diabetes.

more likely than those without diabetes to have 6 or more teeth missing due to tooth decay or gum disease (outcome).

However, we know that in our population, adults with diabetes are older than adults without diabetes and that older adults are also more likely to have teeth missing due to tooth decay or gum disease. Thus, we would like to remove the confounding effect of age, and to understand the underlying association between diabetes and oral health, independent of age. In

standardization, we stratify the data by the confounder, and calculate the proportion of people with the outcome within each stratified group, and we do this separately for the exposed and the unexposed group. In the above example, we would stratify the data and calculate the proportion of individuals with 6 or more teeth missing within each level of age, for the diabetes and non-diabetes groups separately. Next, we would select a standard set of weights based on the frequency distribution of the confounder for that population. For example, we could calculate the frequency distribution of age for the total population. Then we apply this standard set of weights to the stratified-specific proportions for both the exposed and the unexposed group, and then compute the weighted average proportion for the exposed and unexposed groups. In essence, standardization breaks the link between the confounder and exposure, and allows us to ask if the exposed group and unexposed group had the same level of the confounder, what would the association with the outcome be. In the above example, this translates into what is the effect of diabetes on oral health, if people with and without diabetes had the same age distribution.

In the above example, we standardized by age. However, standardization can be used to remove confounding by any extraneous variable such as gender, race, income, health status, etc. Standardization is one of the most intuitive approaches to removing confounding from data. Other commonly used tools include regression modeling and Mantel–Haenszel techniques.

Confidence Interval: The BRFSS surveys a random sample of the Massachusetts adult population and generalizes the results to estimate the true prevalence of disease or behaviors of the entire population. Two successive surveys of the same population may not yield the same estimate of a health behavior, simply due to the random selection process. For example, if we conduct two identical surveys of smoking prevalence at the same time, we may have two different estimates of smoking prevalence, even though the true underlying proportion of smokers in the population is unchanged.

The percent estimate usually provides a good approximation of the underlying truth, although there are a range of values that may be consistent with the data. This range is called a confidence interval. A 95% confidence interval can be considered to be a range of values that has a 95% chance of including the true proportion, given that the data were not biased in any way. The confidence interval describes the precision of an observed estimate of the underlying proportion, with a wider interval indicating less certainty about this estimate. The main factor affecting the width of the confidence interval is the number of respondents.

A 95% confidence interval can be considered a range of values that has a 95% chance of including the true proportion.

Readers should note that not all values within the confidence interval are equally likely. Values close to the estimate are more likely than values near the end points of the confidence interval. For example, the estimate for the percent of adults in Massachusetts who are current smokers is 20.2%. The 95% confidence interval for this estimate is 19.1–21.2%. However, upon repeated surveys, half of the values would be expected to fall within the range 19.7– 20.6%.

Healthy People 2010 Objectives: *The Healthy People 2010: National Health Promotion and Disease Prevention Objectives* are a national agenda that aim to significantly improve the health of Americans in the decade preceding the year 2010. Developed through an extensive governmental, professional, and public national process, Healthy People 2010 defined two

Healthy People 2010 seeks to: increase quality and years of healthy life, to reduce health disparities

broad national goals: to increase quality and years of healthy life and to eliminate health disparities. These goals were supported by 476 specific objectives that set priorities for public health during the first decade of the 2000's. The objectives were organized into 28 priority areas such as tobacco, overweight, and diabetes. For each objective, a numeric national target for the year 2010 was set. For each health status indicator in this report that has a corresponding Healthy People 2010 Objective, the year 2010 target is shown in the relevant graphs and tables.

Median: The median is the middle observation for a set of observations (i.e. the value that divides the frequency distribution into halves). It is also equal to the 50th percentile. For example, the US median represents the point at which half of the states have a higher estimate than the median and half have a lower estimate.

Massachusetts Rank: The Massachusetts rank is an ordering that shows where Massachusetts stands in relation to all of the other states. The lower the ranking (1 being the lowest), the better the state's standing with regards to the particular variable of interest.

KEY LINKS

Health Survey Program: The Health Survey Program is part of the Bureau of Health Statistics, Research and Evaluation at the Massachusetts Department of Public Health. Additional information about the program including other state publications can be found on our website located at <http://www.state.ma.us/dph/bhsre/cdsp/brfss/brfss.htm>.

MassCHIP: Data on selected variables from the Massachusetts BRFSS are available through the Massachusetts Community Health Information Profile (MassCHIP), an Internet-accessible information service available from the Massachusetts Department of Public Health. Information about how to register as a MassCHIP user is available at: <http://masschip.state.ma.us/>.

National BRFSS data: There is a national BRFSS website, located on the Centers for Disease Control and Prevention website, which provides information about the BRFSS, includes listings of publications and questionnaires, provides national data on selected variables, and includes links to relevant websites. The national BRFSS website is located at: <http://www.cdc.gov/brfss/>. A downloadable document that describes all aspects of the BRFSS and survey methodology is located at <http://www.cdc.gov/nccdphp/brfss/pdf/userguide.pdf>.

Healthy People 2010 website: The Healthy People Objectives has been coordinated by the U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Information on the health prevention goals, priority areas, measuring progress in the health indicators and other pertinent information can be found on the Healthy People 2010 homepage at: <http://www.health.gov/healthypeople/>.